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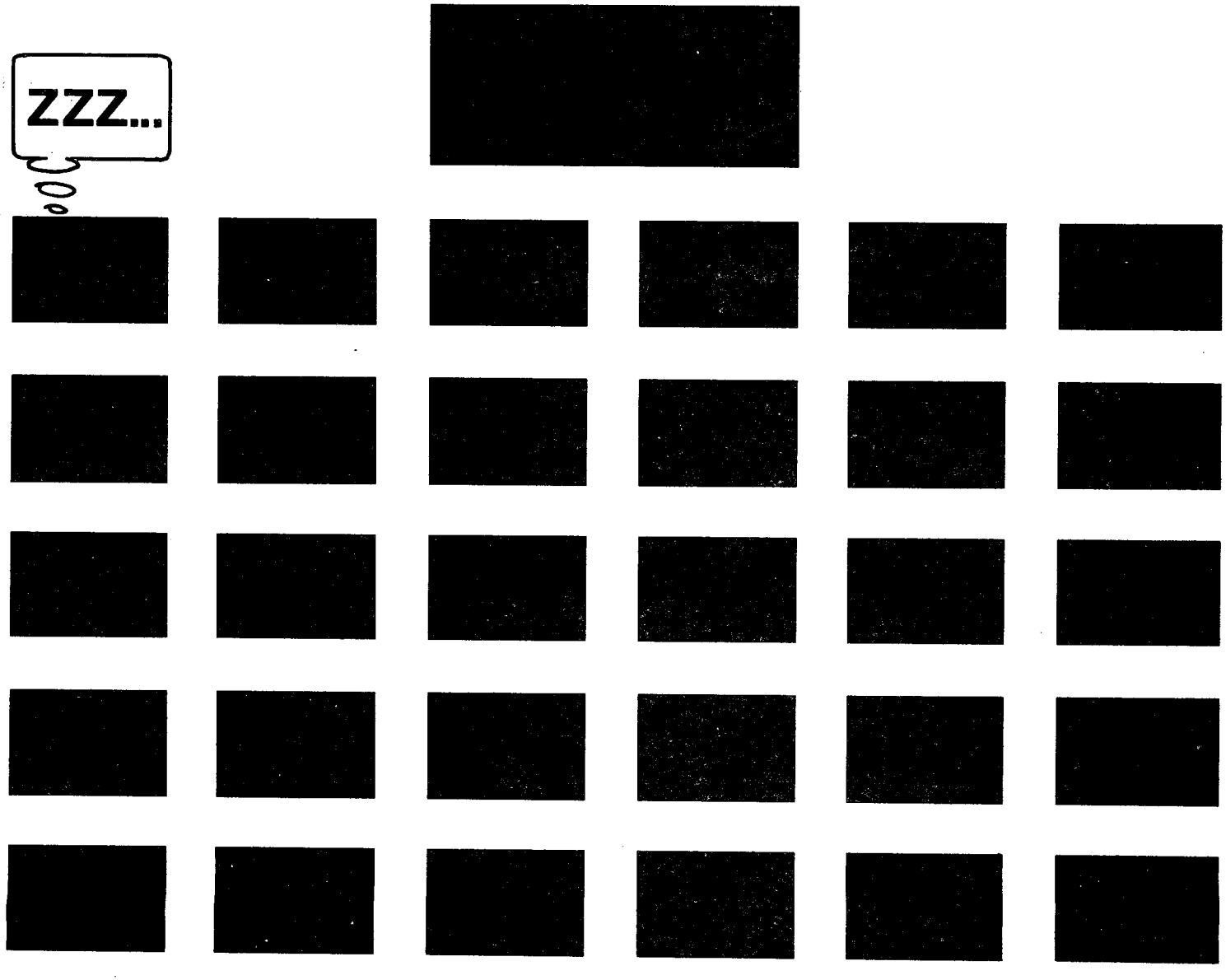
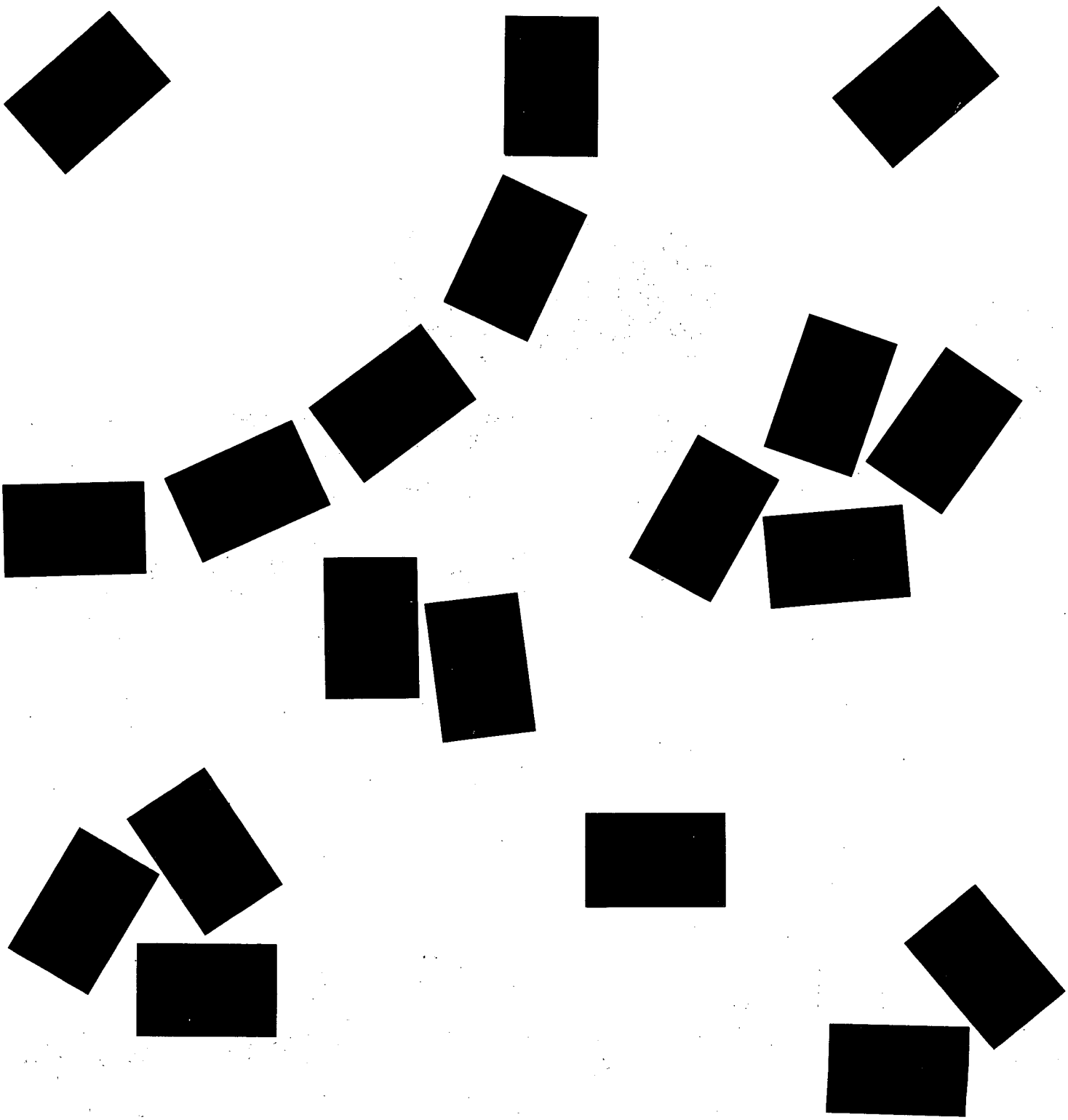
classrooms without education....

reason



education without classrooms



EDITORIAL INTRODUCTION

Lanny Friedlander

Long before the end of this century, schools as we know them will no longer exist. Perhaps as early as a decade from now, Americans will no longer be found in pursuit of college degrees, majors, or standardized elementary curricula, but will learn what they wish through a staggering variety of methods and equipment, much of which does not now exist. In place of today's mind-numbing programs, talent-crippling teachers' guild, and stagnant school/college bureaucracy, there will spring up with surprising rapidity a giant industry providing not schooling but *education*. Free schools, computer pools, telephone conference calls, machine assisted instructions—a broad spectrum of specialized public and private schools, and the return of apprenticeship will work to end today's ineffective semi-monopoly.

Two trends support this view. First, the present system's almost unmixed failure and our increasing awareness of the magnitude of that failure. The second and somewhat less publicized trend consists of the concerted efforts by a small growing number of educators and outsiders to deschool society. These two trends—classrooms without education and education without classrooms—are the focus of this issue.

This month the editors of *Reason* present a double issue devoted to the past, present, and future of education—but especially to the future.

FREEDOM of the foundation

THOMAS JOHNSON

Throughout the history of mankind there have been many diseases, many afflictions, which have debilitated and at times decimated the human species. These maladies usually existed for centuries, elminating millions of unwary victims, before a few gifted and heroic intellects, themsleves also subject to the ravages of these diseases, struggled courageously to discover the causative factors and cures for this host of disorders producing human suffering and death.

Today, as we move into the last three decades of the Twentieth century, we can note the great achievements of the men of science in determining the nature of the organisms or environments which have been responsible for the vast majority of human infirmities. But there still remains one ailment which continues to infect the entire human race, and which has been in existence since the beginning of civilization, that has never been fully identified.

This human disorder which has resulted in more pain and anguish for our species than all of the other diagnosed illnesses, this ailment which has been responsible for the loss of more human lives than all other diseases combined, is not the result of a congenital circumstance. It is not an ailment which can be traced to a hereditary factor and it is not brought about by the invasion of some microorganism. It is an environmentally induced affliction of the most horrifyingly tragic nature for it is brought about by the deliberate actions of humans.

Being victims of the malady themselves, but generally unaware of their debilitated condition, men create the environment in which the next generation will be reared in a similar manner to their own upbringing. It is this irrational environment which is the direct cause of the human ailment which could most appropriately be called Platonitis, being named for the Greek philosopher who, more than any other, delineated the manner in which men must live in order create an environment which is totally alien to man's nature—a controlled environment specifically designed to eliminate individuality.

Platonitis is not a malady which directly affects the heart, liver, lings, or other viscera found in the body cavities. It is a disorder specifically affecting man's most vital organ: the brain. Platonitis could be considered as an unhealthiness lying in the realm of a developmental disorder and one could narrow the stage of development in which the damage is produced to that of childhood and youth. Just as there can be physical distortions to bodily parts brought about by environmental limitations or excesses during the period of child growth, so there can be physiological distortions in the development of the mind if the environment is such that it suffocates the normal functioning of this faculty.

Since all humans are mentally debilitated—since they all suffer from Platonitis to some degree because of their exposure to a perverted environment (a fact perceived by this century's most innovative educational reformer, Maria Montessori, see p. 238 of "The Secret of Childhood")—they are unable to recognize their unsoundness, for they have no way of seeing a contrast with their own condition. They are surrounded by other men who are mental cripples and thus they come to think of their own condition as being normal. Also, and most importantly, the faculty with which men must identify their infirmity, the mind, is the very faculty that is deleteriously affected, making apprehension of their faulty psychological condition extremely difficult. Thus it is no wonder that men have stumbled through millenia, forcing their own unperceived affliction on each new generation, and blindly doing this as an act of love, as an attempt to bring up their new offspring in such a manner that they would be better able to deal with the demands of living.

What are the symptoms by which we can recognize this mental malady with which we are infected? How are we to perceive that we are mentally maimed? The most revealing diagnostic tool is listening to the statements we make and analysing them to discover their true meaning. When we hear such remarks as: "Oh I can't be bothered," or "It's just too complicated and I don't want to think abot it," or "I already have so many things to keep me busy that I simply don't have the time to consider it," and when these comments are made in reference to such matters as political candidates and their platforms, significant legislation pending in or passed by congress, or any other

matter, whether it be general or personal, which will seriously affect the mode of existence of the individual, what is really being said is: "I simply don't have the time to be bothered with thinking and making decisions about issues which are of major significance to my life and to the lives of those I love. I would prefer to have important decisions made by authoritative figures in positions of power,"—in other words, "I would prefer anything to the necessity of having to think," which means, "I would prefer anything to the necessity of being a full-fledged human," for thinking is being.

Another type of statement which will indicate that we are suffering from Platonitis, which reveals the pathological notion that coercion is a valid means to achieve goodness in others, is. "I have a right to force them to do it this way for it is for their own good," or "So and so should be made to do what is best for him," or "I am convinced that this is the way it should be done and we need to establish a regulation requiring that others use this method," or "There ought to be a law."

The most overt characteristics of a person suffering from a severe case of Platonitis are the avoidance of almost all circumstances which call for the full use of his mind, usually coupled with the vehement defense of the idea that the use of force is both necessary and moral in dealing with other human beings.

It is quite easy to determine that men have suffered, and still suffer, from Platonitis by examining the nature of the social institutions which men have established. Prior to the eighteenth century there was a single premise that served as the guiding principle for the actions of governmental, religious, and educational institutions. This premise was *force.* Each of these major institutions was organized in such a manner that a few individuals were either placed in, or seized, the limited authoritative positions and in these offices required the masses to comply with the already established rules or with the newly drawn up laws and regulations which they devised.

It was not until *this* nation came into being, with the writing of the Constitution, that one of these institutions, government, at least in theory, *generally* discarded the use of foce as a method of requiring conpliance to rules of behavior and considered the use of force as only justified in countering force initiated by others. This concept of government was never fully understood or accepted by most men, and it rapidly lost out in favor of a return to statism.

Also, with the passage of time, religious institutions have continually discarded the use of force in dealing with matters of faith, but their support of the use of governmental force in dealing with social circumstances, such as poverty (by advocating government welfare), has steadily increased. It must be noted, though, that this subscribing to governmental action (action which is limited to force or the threat of force) in the area of social needs is in total contradiction to Judeo-Christian philosophy, but this is a fact that is generally ignored by the faithful, both clergy and laity.

Educational institutions, with the very rare exceptions of the Montessori schools, and more recently the Summerhill schools, have tenaciously held to the premise of force for as long as they have been in existence.

The institutions of learning which we see today are establishments which operate on the alleged proposition that a child is born sinful and is thus evil. That he will not desire to better his condition in life by using his mind in the learning process because of his depraved nature, and thus he msut be placed in an environment in which force can be applied to make him learn what others think is best for him to learn—to transform him from an evil youth into a good adult. The *actual,* but generally unrecognized, motive for conducting classes in a purely dogmatic manner is to place the mind of the young in an environment which will frighten the student into subservience and numb his mind, thus leaving him as a mentally enfeebled victim who will not only accept but seek to be controlled by others.

There have always been those who have realized that in order to control man's body, one must first negate man's mind, and in their psychopathological state, believing that man can only exist as a controlled animal with a limited number of individuals doing the controlling, they deliberately established an educational system that would maim the minds of the masses and allow them to retain their positions of power.

Educational institutions maintain a minuscule social structure that is specifically organized on the principles of the philosophy of Plato. In this controlled society there are a few privileged individuals who are presumed to be knowledgable and not as evil as others and somehow have the mystic ability to know what is best for others. These masters, or teachers, are placed in postions of power whereby they can force the major segment of the society, the students, to comply with their "enlightened" directions. What one observes is a dictatorial society, pure and simple, and *psychologically deadly.*

Since the mind of man cannot function under compulsion, since it is a physical impossibility to force anyone to learn anything (although one may frighten another into memorizing specific data, but even this cannot be accomplished without the victim voluntarily willing to do so), the educational system as established is designed to destroy an environment in which the mind can function, in which learning can take place. Any learning which does occur in the schools, happens, as the saying goes, in spite of the system and not because of it.

It is the educational system, operating on and inculcating in the child the doctrine of force, that operates in total contradiction to reality, and it is mainly responsible for the maintenance and fostering of man's most destructive disorder—Platonitis.

There are a number of perceptive humans who have recognized the total irrationality of the philosophy of education and have attempted, in their writings and work, to expose its nature. One such individual was Claparede who succinctly noted that "Our usual pedagogy oppresses children with a mass of information which can never help them to direct their conduct; we make them listen when they have no desire to hear; speak, write, narrate, compose, and discourse when they have nothing to say; we make them observe when they have no curiosity, reason when they have no desire to discover anything. We incite them to efforts which are supposed to be voluntary without the preliminary acquiescence of their ego (their will) in the taks imposed. . ."

Maria Montessori adds to this that "The children thus reduced to slavery use their eyes to read, their hands to write, their ears to hear what the teacher says. Their bodies, indeed, are stationary; but their minds are unable to dwell upon anything. They must be continually exerting themselves to run after the mind of the teacher. . ." (Both quotes from *Spontaneous Activity in Education* by Maria Montessori, p. 269).

Claparede emphasizes that the essence of the pedagogical method is coercion, and Montessori shows the deplorable effects of this action on the children who

are pressured into a frantic race, not a spirited contest involving progress toward the goal of knowledge and an enlightened mind but one which requires that they constantly compete with each other in the attempt to figure out the master of the class—"to run after the mind of the teacher"—in order to please the privileged personage who, if they are lucky, will reward them with some meaningless token, such as a gold star, or medal, or grade, which is their required ticket to success in the system. (The type of competition that exists in the classroom is comparable to that found in a royal court where the courtiers compete with each other for the favor of the king.)

Montessori understood the true nature of the educational system. She realized that its function was not to assist youths in the development of their minds so that they might become mature, fully independent individuals possessing strong wills and capable of making intelligent judgments, for she noted the "constant work which builds up the children's personality is all set in motion by decisions" and that it is the making of decisions that is specifically *denied* students. Rather than existing for the purpose of helping the child in the learning process, the real aim of the schools, as revealed by Montessori, is "to dominate the child, to bring him into subjection, to make him obedient. . ." (Quotes from *Spontaneous Activity in Education* by Montessori, pp. 129, 184.)

Any system which is based on force must have the implements necessary to apply this force to keep the victims subdued. In the educational system these implements are the grades and degrees. The grade is the scholastic gun which is placed in the hands of the instructor, thus giving him full control over his charges. Having this powerful weapon, the instructor can demand that the students follow his every command, for the studetns know that if they choose to do otherwise, if they should decide not to waste their time with nonsensical busy work, if they should choose to challenge a pronouncement of the teacher, if they should desire to write a composition in a manner to their own liking, i.e., if they should decide to express their individuality through independent thought and action, they can be shot down. Students also realize that if they do not go along with the system, if they do not completely submit their wills to others, that they will be denied that certificate of graduation, which in present day society is most essential in obtaining a desired position.

Thus we can see today millions of youths being forced into, or "voluntarily" entering, scholastic prisons, which we euphemistically call schools, where they are exposed to a constant environment of force and fear, where they quickly learn that hypocrisy is the name of the game, that what really counts is not what one knows or wishes to know but how to figure out and please the master of the class. Where they readily come to realize that every other student is a natural enemy who may jeopardize a student's academic standing and that the student who gains the greatest success in the system is the one who is the most subservient, the one who becomes the docile follower of rules, who jumps at every command and sacrifices his will to that of the instructors and administrators.

As John Holt (in *The Underachieving School*) has unmistakably clarified, "School is a long lesson in How To Turn Yourself Off." He correctly asserts that in the schools "What children really learn is Practical Slavery."

Drawn on the top of a student's desk, which is, in reality, the prison cell of the captive inmate of the educational institution, was the sketch of a tomb stone on the face of which a student had written: "In memory of all those who have died waiting for the bell." This anguished expression of despair, silently drawn during one of the long and seemingly never ending periods of boredom that all students are subjected to, vividly reveals the nature of the educational system, a system which suffocates, numbs, and, in some instances, brings about the death of the mind. It is these innumerable periods of torturous boredom that turn students into somnambulant robots ready to be led by any assertive individual who grabs a position of power.

The silent majority that is so often referred to *does exist,* and it is silent because it consists of humans who have been dehumanized, whose minds have been either turned down (in which case the individuals choose to restrict their thinking to a few areas—their work, hobbies, or other special interests) or turned off, and who queitly recede into their own frightened corner of our world and almost beg for some authority to tell them what they can and cannot do. It is only natural that individuals who were subjected to twelve to sixteen years of a completely controlled, dictatorial environment, as they were in school (as students, they were most assuredly the *silenced* majority), would continue to remain silent as adults.

The only reason that the entire world today is not a complete dictatorship is the saving fact that students are only in school five or six hours a day, and thus in their free time, when they are released from these scholas-

tic cages, a number of them are capable of developing some degree of independence and self-esteem, which means, some degree of mental maturity. And it is these few individuals who are responsible for maintaining those vestiges of freedom that remain in the world.

The key issue which must be considered in any human endeavor is not the desired end, which in the case of pedagogy is the educated child, but the means used to achieve this end. Life is a series of steps involving the gaining of goals and the selecting of new goals to be aimed for in the future. These goals, once achieved, are relatively static points along the way which generally serve as stepping stones to higher ambitions. Actual living, though, involves the methods, the means, the actions taken to reach those specific aims, and it is this crucial matter that willdetermine whether or not humans live as civilized creatures or as barbarians.

There are but two ways in which one can act in order to achieve a goal. One can deal with other human beings by means of voluntary action, respecting the rights of all that one comes in contact with and only dealing with others as a trader, exchanging value for value, or one can turn to the use of force, either as a personal act, which is generally regarded as criminal, or as a means to an end which is accepted as proper behavior by institutionalized organizations, such as a government which uses legalized force.

The educational institution is one association which has adopted the method of coercion in the attempt to reach its goals, and it is this means, this method of action, that has resulted in a mentally maimed, psychologically crippled barbaric society that has been thoroughly indoctrinated with the concept that the only way to survive in this world is to dominate others by any means available, to either rule or be ruled, to control or be controlled, to be one of the privileged few, or one of the victimized masses, to be on one side of the desk where one has all the rights and can give all the orders and not be subject to any judgments or be on the other side of the desk where rights are non-existent and where one remains in a constant state of fear and is required to obey the slightest whim of the authoritative figures. (Students often vehemently defend the present educational system and its use of force in the learning process. They believe that most of the classes they attend and the vast majority of the work that they are required to do would never be done unless it was demanded of them. Many students consider the taking and memorizing of notes and the feedback of this information on a test as a learning experience, without realizing that these purely mechanical practices can occur without any learning at all taking place. Their thinking has been so distorted by the present educational system that they are unable even to identify a situation in which they are really using their minds.)

A classroom is one of the most immoral, the most inhuman, environments in existence, for it ignores the chosen, the understood, and the rational and simply demands compliance of the students to the master and his commandments. The proceedings of a dogmatic classroom are mystic rituals devoted to the slaughter of man's mind.

In order to put an end to the use of force in dealing with the minds of the young, completely to eliminate the hostile environment in which studetns are victimized and their mental development greatly distorted so that they cannot help but become mentally crippled adults suffering from Platonitis, it will be necessary to conduct the business of education in an *identical* manner to other free enterprises.

It is not simply sufficient to get the agency of force, the government, out of the business of education-to eliminate politics from the schools—and have all institutions of learning privately owned. This is an important and necessary matter, but it will not in any way alter the irrational pedagogical practices which now exist in both private and public schools. All one need do is consider the name used to designate the individuals in charge of the new private schools that are springing up throughout the South, i.e., head*master*, to realize that the essence of the philosophy to be applied to these schools is identical to that which has existed for centuries (for where there are masters there are also those who are mastered).

Before businesses of education can be established, there are a number of widely held views and practices that must be disposed of.

Our present institutions of learning completely ignore the biological fact of the individuality of every human being. The placing of students in grades according to age, based on the false notion that children who have completed a set number of years are at an identical point of mental maturity, and assuming all children of a certain age have identical interests must be abandoned.

The incredibly irrational idea that learning is something that only occurs in school, and that it can take place only on Monday through Friday during a specific time of the year, must also be given up, for learning is a never ending process

which begins at birth and does not cease until life itself ends.

The maintenance of the medieval implements of torture, the grades and degrees, must also be dissolved, and, when they are, other practices of scholastic institutions which are based on the existence of these weapons of power will vanish, such as required attendance, courses, assignments, and tests.

Compulsory education laws must be repealed so that no individual can be *required* to attend any specific school for any specific number of years. Also, no government licensing of schools or teachers can exist, no subsidies or franchises, no special tax exemptions, in short, none of the features which would distort the operation of schools as full-fledged profit making free enterprises, subject only to the laws of supply and demand.

Since schools have but one service to sell—the service of offering direction or instruction to those who desire it—they would thus operate like any other service business. An educational business would advertise those areas of instruction which it wished to offer for sale and prospective buyers would select from these offerings according to their interests, desires, and financial means. (The few who would be unable to afford even the most inexpensive forms of instruction would be able, in a free society, to gain the necessary funds from any individual or group that might desire voluntarily to provide these funds. *Under no circumstances* could the government use its power to plunder the property of the defenseless citizens and use this expropriated revenue to finance the education of the poor or anyone else. Such an act of force in an adult society is just as immoral and damaging as is the use of force in a youthful society found in the school.) The paying customer would attend classes or participate in the directed activities of the courses and would be in a position to judge whether or not he was receiving satisfactory instruction. If the customer, the student, or his parents in the case of a very young child, decided at an early point in the course, perhaps after two classes, that there was little or no value to be gained from the director of the class or the subject matter, then he could withdraw from the course and receive a full or partial refund, depending on the agreement initially entered into by the customer and the business firm.

In a free enterprise business of education there would be no possibility for instructors to *require* students to do any assignments—there could be no *required* reading, compositions or any form of busy work. All an instructor could do would be to recommend, to suggest, to encourage, to direct the learning of the customer; and it would be up to the student to determine what and how much he wishes to do.

Of course, the instructor, who is selling his service to the customer, has a right to refuse to direct the learning of a student, for in any relationship between humans involving a trade, both parties have the choice of deciding whether or not they wish to engage in the trade. But once an instructor has accepted a student, he is then an employee of that individual, and it is the paying employer, the student, who must judge the quality of the service for which he is paying. If the student decides that he is wasting his time and efforts in an educational pursuit, or if the instructor determines that he does not wish to continue his direction of a student, circumstances which could exist for a host of reasons, then either or both parties could dissolve the relationship, provided an agreement or contract is not broken in the process.

Just as in any completely open, competitive, free enterprise, only the most efficietn, the most talented, the most innovative instructors and entrepreneurs would survive. There would no longer be any need to spend billions of dollars on innumerable educational "experiments" or "projects" in the frantic but hopeless attempt to discover methods of instruction that would work (and what curriculum should be offered). This matter would be solved promptly by educational businesses which would only be able to sell services that customers found to be of value and for which they would be willing to pay. The pedagogical techniques that would, and would not, work (sell) would be established with great swiftness and accuracy. Undoubtedly a torrent of new ideas would flood the market with numerous businesses attempting to discover new approaches to learning that could be offered for sale and which would bring in a profit on the energy expended.

Educational businesses would not be concerned with accreditation. Their qualifications for selling their services would be determined by the individual judgment of each customer, and the reputation which a business was able to build up over the years would be the significant factor that would attract new students.

Entrance requirements would also be abandoned. If students were only taking courses for the sole purpose of gaining assistance in the learning process in subjects of genuine interest , many of the classes which exist today would vanish. Educational businesses would not need to restrict individuals from buying their

services—undoubtedly they would have to actively seek customers as do other private service businesses.

No individual teacher or educational business would grant a certificate, diploma, degree, or any other document, for it is the power to grant such artificial rewards that places the club in the hand of the instructor allowing him dictatorial power over his students whereby he can demand, "Either you do the following or I will not pass you in this course and therefore you will be unable to obtain the certificate of graduation." The real rewards in the free enterprise educational experience will be the gaining of new knowledge and the understanding of how to further pursue subjects of interest.

In *The Declaration of Educational Independence* I wrote: "One will surely ask—If the current educational standards are abandoned, what will take their place? If there are no degrees awarded, how would an employer know the intellectual qualifications of a prospective employee? One can immediately answer that, at present, the employer *cannot* discern that which an individual knows when he accepts a degree as the criterion of judgment, for the degree does not in any way reveal the actual knowledge that the individual possesses. Any employer is *acting on faith* when he takes on an employee simply because he has completed a course of study and has obtained a degree.

"Logically, there is but one person who can judge the knowledge possessed by a hopeful employee, for it is only this person who can determine exactly what the employee must know in order to function in the postion available. This person is the employer. The intellectual standards which he establishes are objective standards, for they are based on the facts of reality which he alone can determine by his knowledge of what must be known by an individual to handle a particular job. It is not only his right but his duty to test the applicant, for he is trading a value (money) for a value (the applicant's knowledge and ability) and he must be sure that he is receiving an equal value in the exchange if justice is to prevail."

Today, as we observe the actions of men throughout the world, as we note the widespread acceptance of the use of force as the means to any end, it must be realized that the adults who operate on this premise are mental cripples. They are dehumanized creatures who have been taught from early youth that life is a battleground and that the only way to succeed is to gain the upper hand, to dominate and control others. The most specialized and lengthly indoctrination in this way of thinking takes place in school, from grammar school through the univeristy. Thus, having escaped from the scholastic prisons as frightened, guilt ridden, semi-humans whose minds have never properly developed, these psychologically diseased ex-students stumble through life attempting to achieve that ever-illusive happiness which they have been told is possible, wondering why neither a position of power nor of subservience brings the satisfaction which they so desperately seek and need.

To attempt to explain to such mentally afflicted creatures that there is another approach to life, that it is possible to use one's mind maximally in making one's own decisions, choices, and judgments in the guidance of one's own life and in dealing with other humans in a fully rational manner is an almost impossible task. Just as one could not hope to encourage a man to remove the bindings from his legs and begin to run and jump if these limbs had been bound for several hours a day for a period of twelve years during which time the muscles had degenerated, so one could not hope to convince an individual to begin to use his mind to its full capacity when it has been shackled for several hours a day for over a decade, leaving it in a maimed and weakened condition. Only the rare few would struggle to regain the strength of their minds and fight their way back to some degree of normalcy, while the remaining masses would shrink in fear from the challenge and tenaciously cling to their debilitated condition.

If there are those who have wondered why there has never existed a free society on this earth, why the human race has been unable to establish a rational and sane existence, it is because the foundation upon which freedom is built has never been establihsed. The most important aspect of this foundation is a philosophy, an approach to life based on the facts of reality as received by man's senses and grasped by man's rational faculty, an understanding of man's true nature and the correct actions which must be taken in order to comply with this nature. At this point in time such a philosophy exists (Objectivism), but it is of limited value if the other essential aspect of the foundation is missing: the presence of a human race that is mentally whole and healthy, a species of men possessing fully developed minds that is aware of the excitement, the exhiliration, the sheer joy of using the mind to its fullest.

Such a race of men has never existed and will never come into being until the youth of the world are recognized as human beings. Until the largest oppressed minority in the world, the children,

are granted their rights as members of the human species. Until the children's prisons, the schools, are completely abolished--leaving each child free to develop his own mind, according to his own interests, at his own rate of speed, in a psychologically healthy environment.

We, in our debilitated condition, possessing minds which have been stunted in their functional development, must admit our infirmity and strive to remove those those conditions which ocntinue to warp the minds of the young. If we are to eliminate the world's most devastating affliction—Platonitis—we must begin by abandoning the institutions of learning as they are presently structured and which are mainly responsible for its existence and replace them with the only type of institutions that will prevent its recurrence—free enterprise businesses of education.

Having done this, we will have created the environment in which full mental development can take place. We will have made possible the completion of the foundation of freedom.

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LIST OF READINGS

In recent years students of Objectivism have been offered numerous lists of readings which contained material that would to a greater or lesser extent substantiate or lend support to the theoretical findings of the philosophy of Objectivism. Most of this material has been within the realms of politics, economics, and psychology. Except for a few books on Aristotle and within the field of rationalist philosophy, philosophy has not received the attention of those who recommend readings to students of Objectivism.

The present list should make up for the obvious lack. As with most books and articles recommended to Objectivists, the present list contains material which must be read (very) critically. Some of the readings are, as it were, right down the line of certain features of Objectivist philosophy. I will try to indicate as succinctly as possible the particular worth of each entry on my list.

Cavell, Stanley *Must We Mean What We Say* (New York: Charles Scribner's Sons, 1969). Cavell is an "interpreter" of Ludwig Wittgenstein and a potentially controversial one at that. But his individual contribution to philosophy bears attention. Particularly important in this "book of essays" are the articles "Knowing and Acknowledging," "Music Discomposed," "A Matter of Meaning It," and "The Availability of Wittgenstein's Later Philosophy." Special attention should be paid to Cavell's observations about skepticism. Although some Objectivists have called Wittgenstein a nominalist and Miss Rand makes uncomplimentary reference to him in her *Introduction to Objectivist Epistemology,* it is my view that there is far more in common between Wittgenstein's and Miss Rand's thought than yet known.

Wittgenstein, Ludwig *On Certainty* (New York: J. & J. Harper, 1968). This is Wittgenstein's latest posthumously published collection of notes. It is devoted to a virtual mental dramatization of the conflict between Humean empiricism, *a la* G. E. Moore, and Wittgenstein's own, what I want to call the "contextualist" theory of knowledge. Wittgenstein goes through the agony of confronting empiricism with the kind of questions that the empiricists cannot treat lightly and finds them, ultimately, unanswerable from within empiricism's own central tenets.

Wild, John *The Challenge of Existentialism* (Bloomington: Indiana University Press, 1955). Wild gives a compassionate but rigorously critical exposition and investigation of Existentialism. His frame of reference is the Aristotelian realism and his respect for human erason keeps him at all times on guard against the explicit and implicit irrationalist tendencies of Existentialists. For those who are interested in working themselves through the maze of pats philosophies and thereby grasp the full importance of Objectivism, this work will be of value.

Weiss, Paul *"Relativity in Logic" The Monist* (1928). This brief article should help students in their attempt to understand just what early-twentieth-century logical investigations have and have not shown about the nature of logic. In a similar vain, Weiss' *"On Alternative Logics"* in Vol. xlii of *The Philosophical Review* will be of immense help.

Zinkernagel, Paul *"On the General Problem of Objective Reality" Mind* (? past 1953). This is a discussion by a contemporary philosopher of one of the central problems of philosophy and one of the main features of Objectivism. Students will, I think, find the author's discussion surprisingly complementary to the tenets of Objectivism.

Benardette, José A. *"Sense-Perception and the A Priori" Mind* (April, 1969). Benardette is addressing himself to the traditional problem of rationalism versus empiricism in the special area of the status of "knowledge via sense-perception." A very thoughtful and productive essay, once again almost in full support of Objectivism's implications for the problem at hand.

"Is There a Problem about Logical Possibility?" Mind (1968). Here, too, Benardette advances views which bear out, among other things, Leonard Peikoff's observation in his discussion of the analytic/synthetic distinction. My own pieces on this issue were written before I learned of Benardette's views; see *"On Conceivability and Logical Possibility" Kinesis* (1969), and *"Another Look at 'Logical Possibility'" The Personalist* (1970).

Matson, Wallace I. *"Against Induction and Empiricism" Aristotelian Society Proceedings Supplement* (1962). Matson argues that those who have attempted to offer an account of induction in terms of Humean empiricism are doomed to failure and offers good reasons in support of the earlier, Aristotelian conception of scientific reasoning.

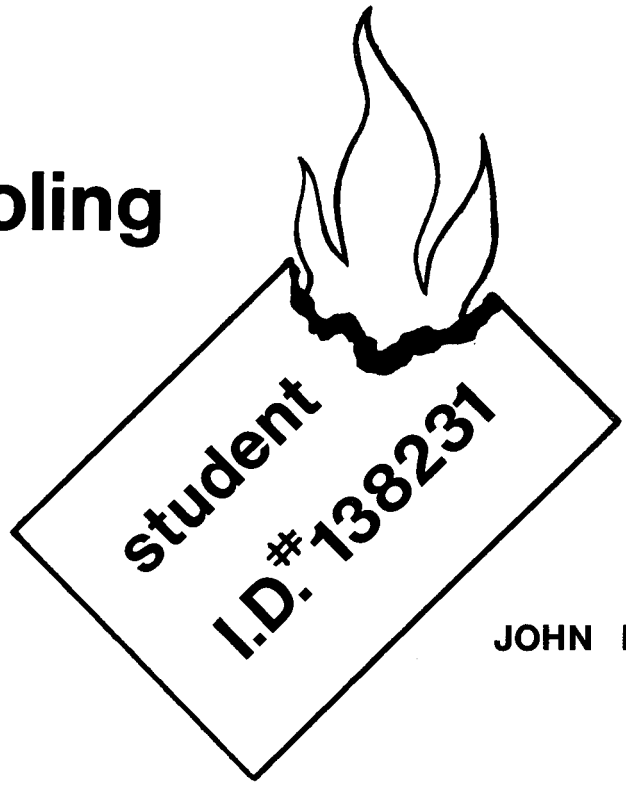
Collins, Arthur W. *"Philosophical Imagination" American Philosophical Quarterly* (January, 1967). Collins is critical of certain uses of the idea of imagination as, e.g., in some philosophers' writings where the locution is frequently encountered "let's imagine that such and such /actually impossible/ situation obtains. . .etc." His observations will aid one in handling such familiar approaches to philosophical argumentation.

Madden, Edward H. *"A Third View of Causality" The Review of Metaphysics* (September, 1969). Madden puts forth a pre-Humean view of causality but with the force of argumentation which has gained much from the philosophical developments of the last centuries.

Pailthorp, Charles *"Knowledge Justified, True Belief" (ibid.).* The author defends a contextual conception of knowledge which is, I think, very close to the view defended by Rand and Piekoff in their lectures and writings on epistemology.

Jordan, James N. *"Determinism's Dilemma" (ibid.).* This is the best article about determinism I have ever read. For students who have difficulty in understanding the full implications of Branden's discussion of determinism in *The Objectivist Newsletter* or are puzzled by certain of its features, Jordan's analysis will be of immense help.

deschooling society



JOHN HOLT

Two ideas are very much in my mind. For one of them, I've drawn very heavily on the thought of writer Ivan Illich. (His work appears in the *New York Review of Books*. *cf.* "Why We Must Abolish Schooling," 2 July 1970, pp. 9-15.) Illich says we must deschool society. My own way of putting it, wihch is not very different, but tactically helpful, is to say that we must dissolve the schools back into society. They seem to me to have precipitated or congealed—a little like a lump in a cream-of-wheat—and the thing we have to do is stir them back into the mix, so to speak. (I was once asked "Why spend all this time talking about improving the schools? We ought to close them down." I said, "No, no, that's not quite the way to put it—we ought to open them up.")

One of the things I've learned in part from Illich—and in part from other sources; Paul Goodman has also been a great influence on my thinking—is that very recently in historical time, mostly within the past century, and mostly within the past half century, our society and, with the possible exception of Tanzania, every country in the world, has done a most remarkable thing. We have locked up learning in schools. To put it another way, we have defined education (or learning) as schooling. We have decided as a matter of social policy to measure people's education, their learning, their competence, and their job-worthiness almost entirely in terms of the amount and the fanciness of schooling that they've been able to consume. And every country in the world, as I've said, with the possible exception of Tanzania, because they're too poor to do it, has taken this step. It is a disaster.

Let me paraphrase Illich. He points out that defining education as schooling has a number of very horrible consequences. One is that we make it so expensive that most people in the world cannot now afford it, and at not time in the foreseeable future will they be able to afford it. We have created a permanent shortage. He (Illich) first came upon this awareness when thinking about the underdeveloped countries—his interest has been very much in Latin America—and he has done a lot of investigating into their educational policies. He discovered that they were spending enormous portions of their national budget on education. But since all this was being funneled into schools, it had the second effect that whatever public money a country decided to invest in public education, it was almost invested entirely in the schooling of the children who could stay longest in school. And naturally those were the children of the rich. We have the situation in these poor countries that children of the rich have very much more public money invested in their schooling than the average poor child. The difference, the discrepencies are staggering.

In most South American countries this discrepency between the amount of public money that gets invested in a kid who comes out (so to speak) at the top of the educational machine and the average of kids at the bottom is on the order of 350 to 1. In one country, Bolivia, the ratio is 1500 to 1. So that's another consequence of defining education as schooling—you put it out of the reach of most people, and the people whose reach you put it into are the people who are most privileged anyway.

There's no greater myth than the one that increased schooling is somehow a great social equalizer or leveler. There probably has never been a more powerful instrument for maintaining the class system or power structure in any country than the schoolrooms.

Illich also notes that the position of schools in modern society is very much like that of the church in the twelfth or thirteenth centuries. It has that kind of universal grip on people's imaginations. And not since the Church has there been an institution which had this "power" to cast people out and then make them think that it was their own fault. He points out that most underdeveloped countries have passed compulsory schooling laws—Brazil is an example—which make school attendance required up to the age of 16. Half of the children of Brazil do not even enter the second grade, because there is no second grade for them to enter. The most optimistic social planners in Brazil cannot foresee any time within the next generation when they will have schools for even as many as one-fourth of their children. Yet there is a compulsory legal obligation to attend!

To quote Illich again, the one thing schools really teach, all over the world, and they teach it to everybody—is the superiority of the schooled over the unschooled. So all these people who in their own eyes are dropouts, all the people who have failed to take advantage as they see it of a legal opportunity, a legal obligation, can then blame themselves. So you can see, we have here an instrument which can separate society into chiefs and braves, sheep and goats, high and low—an instrument which can effectively condemn the vast majority of society to a kind of permanent inferiority and convince them it is their own fault. It's a superb defuser of political, or revolutionary, or change-making potential. It's marvelous if you get people to say in this country, "If I'D been smarter, if I'd done more work in school, I'd have had a chance for a good job."

Defining education as schooling—making it so expensive that no country can afford as much of it as its citizens want, or think they need, or are trained to think they need—is that it is not only true of the poor countries, it is true of every country, including the richest country, which happens to be our own country. Illich looked at some statistics on these matters that have been collected from independent sources that in the last year for which we have figures (1969), indicated *this country* spent on public elementary and secondary education something on the order of $36 billion. As we all know, this money was very unevenly distributed between the children of the rich and the children of the poor. To have provided equal resources in terms of building, equipment, teachers' salaries, and all of this kind of thing—to have provided equal educational resources would have cost somewhere on the order of $80 billion. Projected figures for 1975 are that we will spend about $45 billion and that to get equal resources for all children we would have to spend a little over $100 billion. These figures did not take into account the costs of college or graduate education, which are much more expensive per pupil and for which the demand is rising even more rapidly.

What sort of adjuctments do we have to make to these figures? Well, the total educational budget for 1969 is about $70 billion, which is about twice the figure that was being quoted for elementary and secondary education. The inequality of resources is even greater at the college and university level, so I think you could say that if you had provided equal resources at the elementary, secondary, and university levels for all our people in 1969, it would have cost something on the order of $130, $140, or $150 billion. In 1975 we would have to spend on the order of $200 billion.

We aren't going to spend that kind of money. There's no possibility; you read about the taxpyer revolts, the alumni revolts, the bond failures. We know something about the kind of trouble private colleges are in and the kind of problems State universities are having with their legislatures. The people have come very close to the limit of what they are willing to spend on schooling. We have created a situation in which the demand vastly outruns the supply. It has to, it can't possibly be otherwise.

The struggle between social groups and classes, and racial and other minorities, for these *ARTIFICIALLY* scarce educational resources is one of the most bitter, divisive, corrosive, and inherently insoluable problems we've got.

This is part of what is in my mind when I say that we have to think about deschooling society, about breaking up this definition of learning as schooling. But there is still a further consequence of defining education as schooling, which even Illich has not written about. We've generated a race for the competitive consumption of schooling.

Now the competitive consumption of anything leads to fairly ridiculous results—preposterous or dangerous might be better words. Our competitive consumption of automobiles has led us we can all see where. But there is at least this much to be said for competitive consumption of automobiles—if I had a car and my neighbor down the street bought a bigger and fancier and longer and more expensive car my car would not die of jealousy in the driveway or become any lesser a car because somebody else had a bigger one.

But this isn't true of schooling. If you have a certain quantity of schooling, let's say a high school diploma, every time somebody else gets a high school diploma, the value of yours goes down. Every time somebody gets more schooling (a bachelor's degree or whatever), the value of your high school diploma goes down even further. When your neighbor buys a Porsche, however, your Ford does not cease to work well. Education we see is different.

When everybody gets a particular academic credential, the value of that ticket-credential-piece of paper, the cash-in value goes to zero. I came to my office today on the MTA from Boston and saw this sigh, one of the "Finish high school," signs, the "Stay in school, get a good job" kind of thing. If they ever get that message across, and everybody really does stay in school and everybody gets a high school diploma, a high school diploma will be worth just what an elementary school diploma is worth—i.e., nothing.

So let's put up a whole lot of new signs—"Go to college, get a good job" and spend $200 billion so that everybody can in fact go to college. If we can persuade all the young people in the country—which seems most unlikely—to put up with four more years of what they put up with, so that everybody finally gets a bachelor's degree, *that* will become worthless. It's not worth too much right now—as some of you may have found out who got one recently. There are already people, have been for a couple of years, talking about the need for a post-PhD degree because the PhD degree doesn't mean anything anymore.

That process can go on forever. As fast as we get everybody one academic credential, get them up one step of the pyramid, we're going to build new pyramids on top of that. It's the rat-race to end all rat-races.

There are some other anomalies of schooling. We have attached to or dropped on our schools three functions: one of them you might call education. This people would define differently, and they would

have different opinions about how you get it or what you do to get it. It has something to do with human growth and development—people get "smarter," they know more, they understand more, they can do things better, they become more perceptive; it is growth of human potential. Maybe not everybody, but a great many pople in schools are reasonably committed to this. Growth is one of the things they want to have happen.

But we've got two other functions in our schools. One of them, if you want to be polite, you can call the custodial function; if you want to be blunt, you can call it the jail function. The point is the same either way. There are very large numbers of people in our society who do not want young people "hanging around." Mothers want them out of the house, merchants want them off the streets and out of their stores, workers want them off the job market; so we need a place to put them.

We put them in places called schools. Up to a certain point, we do this with compulsory attendance laws, and we hope that by the "release" age they will all be so hooked on the superiority of the schooled over the unschooled that sheer greed or fear or anxiety will keep them in a little longer. In other words, that they'll stay in the cell even after we've unlocked the door.

The third function of schools is one that follows in the line of that infamous Selective Service director we had a few years ago, what you might call "channeling," or "grading", or "labeling," or you might call it "sorting"—at any rate, the schools have become the principle mechanism for deciding who goes where in society and deciding who gets what.

This is a recent development.

I don't say a society anything like what we have now in the world can avoid such mechanisms, but the point is that, until fairly recently, these mechanisms were not in the schools. As Paul Goodman has pointed out, at the turn of the century only about six per cent of our young people finished high school and about a quarter of one percent went to college. That means that this country, which even then was a very scientific, technical, and industrial society (hard as that may be to believe), this country was largely run by what we now call dropouts. There were other ways of learning all the things that people had to know in order to make a society like that go, and there were other ways that society decided who was going to do this, who was going to do that, who was going to get good jobs and not so good jobs, or make a lot of money, or make very little money. This function, this channeling, sorting, grading, labeling, function, has been dropped on the schools.

Now the point I'm coming to here is that the first of these three functions, which a very large majority of poeple involved with the schools really do believe in—education—is absolutely opposed, incompatible, and irreconcilable with the other two. You cannot do the first and the second and the third in the same place. You cannot make schools into jails and expect them to be places where much human growth can occur. And you can't get very much in the way of human development in a place where you're constantly sticking "winner" labels and "loser" labels on people.

When you turn education into a race, which is essentially what we do, you have to have many more losers than winners. That's how *races* work. We really have to award a hundred loser lables in our schools for every winner label we put on. The trouble with putting loser labels on people is that they begin to feel like losers, and think like losers, and act like losers, and human growth stops. There is no way to change that, except to get out of the labeling business. I'd really like to see schools and universities get out of the diploma/credential-granting business altogether. A society that has needs for tests of skill should have them at the place the skill or competence is to be used.

The difference I thing is put very simply this way. We require people to pass a drivers' test in order to get a driver's license. Fair enough. We have not yet got to the point where we say "You can't have a driver's license, or you can't take the driver's test, unless you're a certified graduate of a certified driver-training school." If you can learn to drive your car in a pasture somewhere, or get your second cousin's brother-in-law or some guy down the street to show you how to drive the car, nobody cares how you learn to do it, as long as you learn to do it. This, in a nutshell, is the situation that people like Illich and Goodman and myself are interested in. A situation in which it's *what* you know that's important, not where or how you learned it.

Now the other idea that is very much in the forefront of my mind is a goal, or an ideal, which is even more remote than what I've been talking about. Let me make here a distinction between what I call goals and what I call tactics. What I mean by goals is simply the way I would have things if I could have them any way I wanted. Ideals—visions. Of course I can't have things as I want them, neither can anybody else; we're all more or less boxed in by circumstance. The problem then is, beginning where we are, hemmed in as we are, how we get from where we are to where we want to go? How do we move in the direction of our goals? These are tactical questions, and some of them are very short range. Others are more distant. People find themselves at different places on the tactical road, so to speak.

Not everybody is tactically where I am in the matter of education, but I'm very interested in talking about how to move down this road, no matter where people are.

In our society, poeple who talk about goals, or ideals, or visions, or utopias are usually called idealists. As you know, it is not a compliment. If you want to compliment somebody, you call him a realist. Or better yet a hard-headed, even a hard-nosed, realist. A hard-nosed realist says, "I don't mess around with all these vague, woolly, abstract idea kind of stuff, I've got problems to solve. I've got to take these problems as they come, you know. I've got to get things from the 'in' basket to the 'out' basket."

And indeed he does. But you can't be a *realist* unless you are also an *idealist.* You can't find sensible solutions to day-to-day problems unless you have some kind of vision or sense of what it is you really want. If I were to say to you, "What's the best road out of Cambridge?" you'd say to me, "Where do you want to go?" If I said, "Oh I don't care where I go, I just want the best road," I can think of a lot of things you might call me. You wouldn't call me a realist. Now our country, indeed our world-wide society (with respect to what seems to me important, there is very little difference between one place and another whatever they may say about what they're doing), society is full of so-called realists—what C. Wright Mills called "crackpot realists." They stagger and lurch from crisis to crisis—do you know enough physics to know what Brownian motion is? Just generally, what mathematicians call "drunkard's walk." I think we have to have goals before we think about tactics.

A long run goal that I've come to believe in is what I call "children's citizenship." I have been calling it "children's liberation" but the word "liberation" seems to me to be kicked around by too many people using it in too many

ways—it's already loaded with different connotations, many of them bad, and it's not precise enough anyway. So I like "citizenship" better.

What I am urging is that we abolish the institution of childhood. The fact of childhood, the fact that some people are younger than others and that in the early years of our life we are smaller, more ignorant, more inexperienced, and in many cases, clumsier than we will be later, these are facts of biology and always have been. But the institution of childhood, the decision to divide human life into two quite separate chunks, one called childhood and the other called adulthood, is historically a very recent one. Most cultures never did it, but Western cultures seem to have.

This creation of a kind of artificial, special, supposedly protective (but in fact exploitive) status called childhood is socailly, psychologically, and educationally a disaster. We have to admit it. We have to open the door, so to speak, to participation in the society, so that children can go through it if and when they feel ready. Very specifically, I propose and I urge granting children virtually all the rights and privileges and perogatives and responsibilities and duties which we grant to adults. I favor pushing these down the age ladder as far as we can get them. I want to make available to children—available, mind you—the choice for any and all of the rights which we now think belong only to adults. I mean the right to vote. I mean the right to hold, to buy, or sell property. I mean the right to work, the right to privacy, and the management of one's own life. The right to travel, the right, if you choose to live away from your own family, your blood family. If you need a guardian, the right to choose, on the basis of mutual agreement, one that seems right to you. The right to direct your own learning and your own life.

I want this as a *choice.* I'm not proposing that every six-year-old be fired out the front door of his house on his birthday, being told, like in a cartoon, "Never darken this door again." I suspect if this option for participation was available, if children could enter adult society as they felt ready to, that many children would stay (although not so long as they are now compelled to) in a state of subservience, dependence, protection. That's OK with me, all I want is that they should have the choice. I do not want to do what we now do, which is to lock every child inot a few relationships from which he has absolutely no escape.

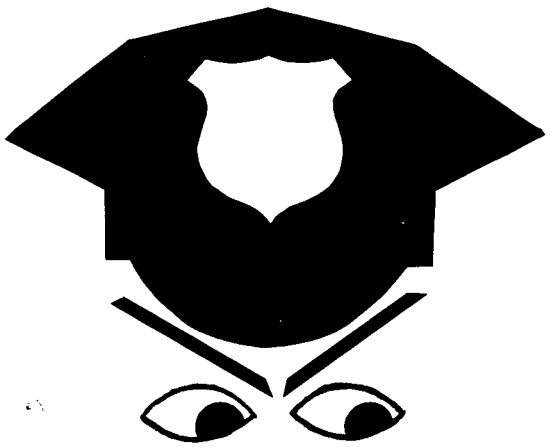
And the other thing I would say is this. One of the reasons our schools are in trouble is that we have asked them to do all by themselves what used to be done by culture, by the community, by a great number of people. A kid growing up in a genuine community, in a smaller town or village, was very likely to have relationships of different intensity with ten, fifteen, twenty, thirty older people. He may very well have had around him what we call an "extended family"—aunts, uncles, grandparents, cousins, second cousins, plus neighbors who would pay varying kinds of attention to him.

It was a whole range and repertory of adults from whom he could draw various kinds of examples, advice, answers to questions, support, and sympathy, consolation, whatever he needed.

These *networks*—this is an Illichian phrase; he wants to create new kinds of open educational networks in society—have disappeared. What we now have is mom and pop and teacher. And even if mom and pop and teacher are the nicest people in the world, and they really dig this kid, and he really likes them, it is not enough—it is just not enough people. He needs more. And in most cases, they don't like the children that much.

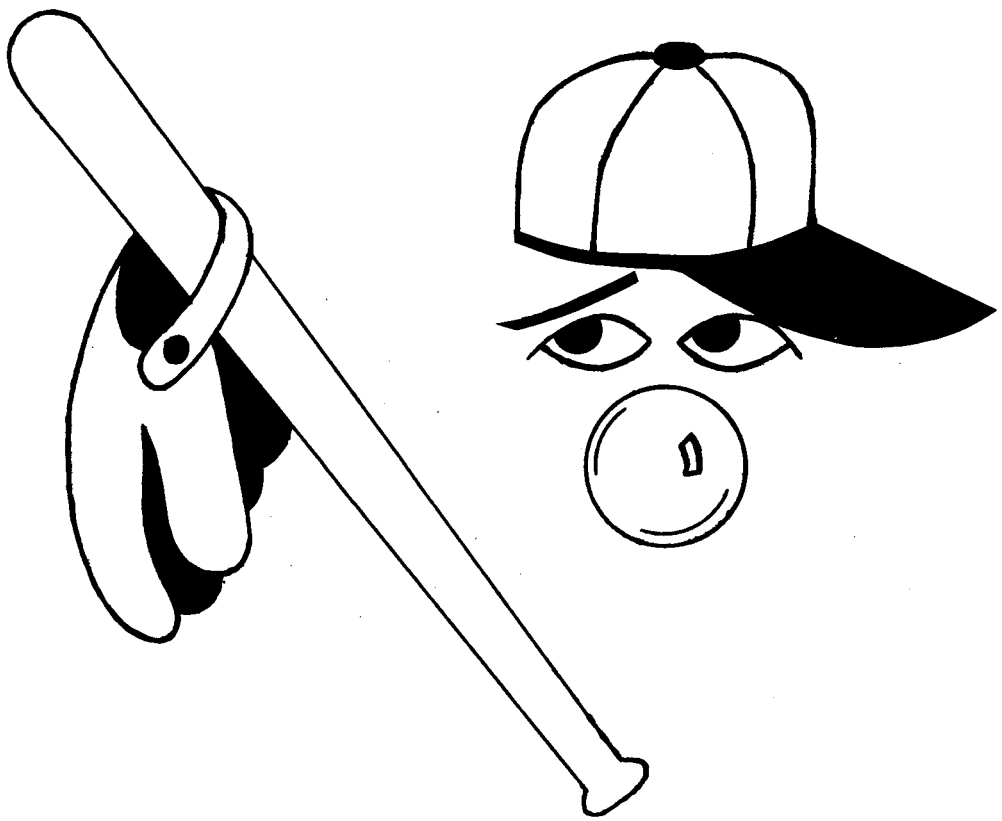
Today if he comes up to some adult he sees working and asks him a question that he watns to have answered, the result is probably, "Go ask your teacher. What are you doing out of school? Go ask your mother. Go on home. Don't bother me, kid." In other words, people have said "OK, children, you are the responsibility of your mother and your father and your teacher and I wash my hands of you." This is what I mean when I say we have loaded onto the schools and the parents a burden which used to be distributed among a much greater number of people and talents. These old networks have disappeared. We hardly have any communities any more, in the sense we once did. The extended family has been destroyed as an institution; it was not young radicals but industrialization that destroyed it. It had been largely destroyed even when I was growing up. I think the only way children are going to find new networks—a chance to make a whole lot of new relationships—is by giving them the *freedom* to make them. I do not believe we can provide the networks for them. The child has to have a kind of chance that he does not now have for finding his teachers, finding the poeple who will teach him. And he cannot do this so long as he is locked into these two little boxes—one, the home; the other, the classroom.

John Holt is the author of several outstanding books on education, including HOW CHILDREN FAIL, HOW CHILDREN LEARN, THE UNDER-ACHIEVING SCHOOL, and the recently-released WHAT DO I DO MONDAY?



compulsory schooling

JOHN NELSON



Compulsory school attendance is today enforced by law in all States of the union and in almost all countries of the world.

It was not always so. The first compulsory school attendance law was enacted by an autocratic Prussia in the 1820's. It was not until 1852 that Massachusetts passed such a law.[1] Even as late as 1900 "only twenty-nine states had passed compulsory education laws" and among these "it was an exceptional state that required the student to attend school as many as twenty weeks per year. Half of the states that had attendance laws in 1900 required the student to attend school only twelve weeks per year, and not more than eight of the twelve weeks had to be consecutive."[2]

Does the rise of state-enforced school attendance represent, as most educators and laymen alike seem to think, true progress? Are we—are our children—truly better off for it?

In what follows I shall cite what I think to be the strongest claim that can be presented in favor of compulsory school attendance laws and the strongest claim that can be presented against their institution. I shall examine each claim in turn. What this examination will show, I contend, is that the strongest claim in favor of compulsory school attendance saws is demonstrably false, while the strongest argument against their institution is in all probability true.

I should point out in passing, that by "strongest claim in favor of school attendance laws" I mean that claim which predicates of compulsory school attendance laws a greater good than any other good that can plausibly be attributed to their institution and by "strongest claim against their institution" I mean that claim which predicates a greater evil than any other evil that can be plausibly attributed to their institution. Thus, if the evil in question outweights all lesser goods that might plausibly be predicated of compulsory school attendance laws and if our demonstrations are themselves sound, it follows that state-enforced school attendance is in the balance and evil and not good and should therefore be abolished. I shall not attempt to demonstrate that the evil which our second claim predicates of compulsory attendance laws does, in fact, outweigh all such possible lesser goods (e.g., "Compulsory school attendance laws keep children off the streets," etc.), but I *maintain* that it does. If the reader should agree with me in this and in my demonstrations, he ought also to agree with me that all compulsory school attendance laws should be repealed forthwith.

The Strongest Claim for Compulsory Attendance Laws

By all odds the most powerful and persuasive claim that can be advanced in favor of compulsory school attendance laws is the claim that without them children, by and large, would not learn to read and write. They would be illiterate. Thus, Professor M. R. Charles argues: "In Colonial America no child was obligated to go to school. Even the colony of Massachusetts, which had passed a compulsory education law [the law in question required children to be able, at a certain age, to read the Bible], did not require attendance at a school. A child could stay at home and learn how to read. As a matter of fact, most of the children did stay home—and most of them," Charles adds, "did not learn how to read."[3] The conclusion that Professor Charles hopefully wants us to draw is: "Compulsory school attendance laws are necessary."

What can we oppose against this argument and the evidence presumably adduced in its premises? We can point out that both the actual evidence and the conclusion indicated by the actual evidence are the very opposite of what Professor Charles maintains.

His claim to the contrary notwithstanding, the colonial New England community was a highly literate one. Though its children did not, by and large, attend school they did, by and large, learn to read and write. Here, for instance, is what Arthur Schlesinger, Sr. said on the matter: "While no contemporary figures exist, a historian's painstaking examiniation of the relatively frequency of signatures as contrasted with marks on official documents indicates that in Massachusetts and Connecticut the illiterates in 1700 numbered only one out of twenty. John Adams in 1765 could observe that such hapless New Englanders were 'as rare a Phenomenon as a Comet.'"[4]

But may not colonial New England be the exception that proves the rule? We do not think that exceptions prove rules; but if they do, colonial New England was not, with respect to literacy, *such* an exception for it was not, to begin with, an exception. One might indeed say: wherever literacy has been esteemed and men have been comparatively free, literacy—without the need of any coercive law, tax-subsidy, or other alien implementation—has flourished. Consider an example.

In eighteenth century Pennsylvania there existed neither compulsory school attendance laws, compulsory education laws, or tax supported schools. In the more emote regions which, in particular, were being settled by immigrant Germans, life was exacting and hard; people were widely scattered; schooling of any kind was difficult to obtain.[5] Yet, literacy among these people was maintained at such high levels that "In 1789 Dr. Benjamin Rush, in commenting on the status of education, wrote that there was scarcely an instance of a German of either sex in Pennsylvania who could not read..." and according to "the *Philadelphische Correspondenz,* during the year 1790 there were less than four natives in most townships of Pennsylvania who could not read or write."[6]

When it is remembered that what is meant by *reading* in these accounts is not "reading a primer" or "reading a comic book" but "reading the Bible," we cannot help but wonder how a modern township, with all its compulsory school attendance, "professional teachers," costly edifices, and a population forced during its youth to spend the greatest part of every day and year, year after year, in school, would stand in comparison. We should imagine— having censored mail for several years in World War II—not very well.

The Strongest Argument Against Compulsory School Attendance Laws

The strongest argument against state-enforced school attendance is certainly the argument that compulsory school attendance induces juvenile deliquincy, crime, and drug-addiction. What support does this argument have?

On the basis of a careful study of juvenile deliquents and drug-addicts, covering 343 individuals, Dr. Herbert Berger, director of Medicine, Richmond Memorial Hospital, New York, has this to say regarding the anti-social and drug-oriented behaviro of the individuals in question: "Obviously, there is no single easy answer to these behavior patterns but one factor stands out in almost all these interviews. It was an absolute hatred of 'Compulsory Education!' This symptom was noted by the patients early in primary school and became full blown by the age of 12."[7]

In support of the conclusion that he draws, that compulsory education causes juvenile crime and drug-addiciton, Dr. Berger notes that while schools are widely vandalized, indicating the resentment of someone jailed against his jailor and his jail, libraries are not vandalized and and disturbed. He comments in explanation: "The library is attended by those who want to read. Should they be noisy or discourteous this privilege would be revoked. The obvious antithetical situation vis-a-vis schools is too apparent to require elaboration."[8]

But is not, perhaps, Dr. Berger's evidence "tainted"? Cam we place reliance on the testimony of juvenile deliquents and drug-addicts? May not such persons in attacking attacking compulsory schooling simply be expressing their resentment of things (and their own bankrupt lives) by lashing out blindly at the most prominent object in sight? Dr. Berger does, in fact, grant that his evidence is not conclusive.[9] There exists, however, other, independent corroboration of his claim. For example, the prestifious Crother Committee 1959, investigating the relation between crime and education, discovered (somewhat to its dismay) that the following concomitant variation held: ". . . the last year of compulsory education was also the heaviest year for juvenile deliquency and. . . the tendency to crime during school years was reversed when a boy went to work."[10] By almost any believable interpretation these findings show that compulsory schoolattendence exerts a pernicious effect not merely on youths who might be pre-disposed to moral or psychological breakdown (perhaps Dr. Gerger's subjects) but on all youth.

John O. Nelson
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FOOTNOTES

1. Charles, M.R., *A Preface to Education,* (New York: Macmillan, 1965), p. 94.
2. *Op. cit.,* p. 94.
3. *Ibid.,* p. 75.
4. Schlesinger, Arthur M., Sr., *The Birth of the Nation,* (New York: Alfred Knopf, 1968), pp. 156-7.
5. Livingood, F.G., *Eighteenth Century Reformed Church Schools,* (Norristown, Pennsylvania: Norristown Press, 1930), p. 7.
6. *Ibid.,* p. 196.
7. Berger, Herbert, *Medical Times.* December, 1969, p. 181.
8. *Ibid.,* 181.
9. *Ibid.,* 180.
10. West, E.G., *Education and the State,* p. 36.

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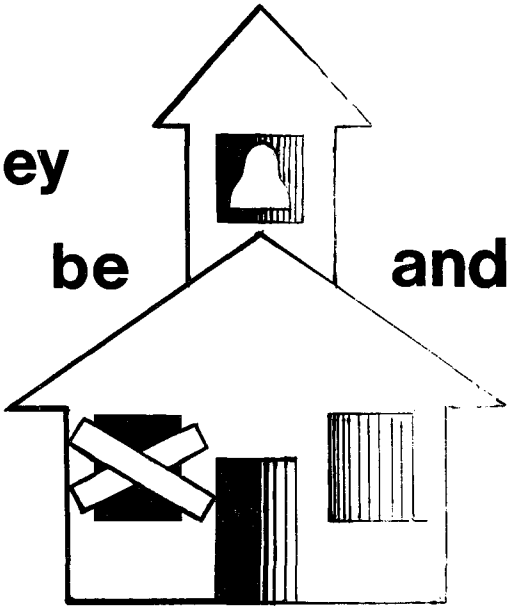

TIBOR MACHAN

To say that American education is at a point of extreme self-consciousness does not seem to require extensive justification. Just being awake and reading the newspapers will suffice to avail us of this fact.

There are probably more things the matter with education in America today than anyone could discuss in a short essay. An understanding of our educational problems, even if we grant that it is in principle possible, would take extensive and very careful hard work. I shall confine myself to some more or less basic points.

To start off I will have to propose a definition of education that can be defended without extensive philosophical argumentation about definitions, knowledge, and the nature of truth. That itself is difficult. It may seem like wanting to escape the burden of dealing with the really difficult issues. But things are not always what they seem, so I will proceed.

Education will be taken to be, in the present context, an endeavor of human cooperation for purposes of assisting individuals to develop their intellectual capacities to cope with their world *so that they may lead their lives well.* This, I think, is broad enough to be non-controversial. The acceptance of this definition will, however, commit one to certain propositions which may not be obvious at first.

Although education in America is something that occurs at many different levels of complexity, appropriate to age and circumstance, in an investigation which aims to treat *fundamentals* it is not advisable to ponder over the *variations* of education.

There are a few points which must be developed before we can discuss the place of education within a culture. These have to do with some of the basic principles principles which all levels of education must observe in order for them to be education. For example, if we take the concept "cooperation" as central to education, it will be clear that those involved in the endeavor of education must be *active* parties. Those who assist and those who seek assistance need to play *active* parts. Once one party to the cooperative enterprise defaults on his active role, the element of *cooperation* has been lost and education itself may falter to a corresponding extent.

On the level of everday educational activities, John Holt illustrates well, in his work *How Children Fail,* just what happens when either pupil or teacher fails to play an active role. We may summarize his conclusion to the effect that instead of becoming facilitated in the particular field of learning and teaching, both pupil and teacher will resort to evasiveness in order to hide disinterest and lack of participation. Children from their earliest years tend to respond to educational ventures which they do not want, or,therefore, enjoy, with distaste and with clever methods whereby their unwillingness to cooperate is hidden from teachers and other observers.

The practice of lying and "psyching out" the teacher starts way before a student's undergraduate or even high school years. In colleges this practice emerges through the answering of questions on tests with reams of nonsense so as to present the impression that learning has taken place. Here, as in earlier schooling experiences, the aim is not to perform well but to avoid pain, punishment, or a bad image. (Personally I have always tried to induce in myself and others the habit of admitting ignorance both in test and classroom situations. I would recommend showing appreciation for such admissions, even when accompanied by advice for improvement.)

What, beside the fact that those partaking in educational endeavors must play an active role, is *basic* to all educational ventures? The *possibility* of actually learining something, of attaining knowledge, and of attaining knowledge that relates to some area of a pupil's values has to obtain in all educational ventures. Education is the development of capacities, the "bringing out" of ignorance into knowledge for someone—presumably the pupil. If either teacher or student is basically convinced that we

cannot have knowledge of things, that all we may achieve is subjective beliefs, and that other than perhaps direct experience (so called) there simply is no road toward learning something—if these convictions or feelings prevail, education cannot take place.

We may have indoctrination: we might *pump* some beliefs into our pupils' minds, or we may have certain beliefs pumped into into our own; but that is not education. It is something that we do with horses, dogs, and perhaps computers; but if we presume that *that* is what we are doing in engaging in the educational endeavor, we violate the first principle, namely the recognition that education requires *active participation.* Pumping is a one-sided venture, and so are programming, indoctrinating, and training. A total skeptic, one who believes that knowledge is impossible for human beings, cannot have a viable approach to education. His conviction contradicts one of education's basic requirements—in effect, if there is no knowledge, there *is* no way to assist the pupil out of his ignorance.

In addition to the above, education must presume some form of *free will* on the part of all those engaging in educational activities. If a pupil is not free to attend to the subject being taught, if his activity in the learning process is simply reactive, prodded out of him by clever stimulation of his brain cells or expected of him by virtue of some inherent instincts, then we are not talking, again, of an *active* pupil (nor, of course, of an active teacher). If we are determined to do what we do, either through prodding or through our inherited or early acquired drives, then it is not really we who engage in the activity of learning. We are, like complex biochemical biochemical organisms without the power of self-generated action, simply moving through behavior patterns. One may have this view of human nature and believe in indoctrination, training, programming; one cannot, however, think that a man could be party to an *educational* endeavor.

Arguments against free will abound, of course, and one would do them injustice to treat them as briefly as this discussion permits. My grounds for believing that they all fail is that without the element of human freedom in at least one area of human activity, namely in the assessment of the truth or falsity of judgment, there would be no way in which to assess *the truth or falsity of the view that "free will does not exist."* If *we* are entirely determined, then, of course, so are our judgments of whether something is or is not the case. Since all judgements would have to be products of determined behavior, including judgments about whether this or that view of free will is right or wrong, then one's view of human nature would be neither correct or incorrect but simply *there.* Which would make nonsense of the contention that "free will does not exist" *in the face of any denial* of that judgment. Both judgments, though contradictory, have equal merit—which is to give way to blatant contradictions and cannot govern thinking. No doubt more could be said, but I simply want to make clear where I stand on this matter, should it arise in later discussion.

Finally, in order to have a viable conception of education, one which is distinguishable from indoctrination, training, etc., we must admit of the distinction between the knower and the known. The pupil must be viewed as a being *capable of gaining knowledge* but not identical to that which is to be learned. In other words, we cannot accept solipsism (or idealism) as our model for the human mind. If our *mind creates* what is known, then we cannot learn about something; nor could we learn about something from someone else. Information would be part of the pupil's mind to begin with, and it would make little sense to speculate on what meanings we could attach to our terms—e.g., learning, ignorance, discovery, inattention, research, etc.—within educational theory and practice if we denied the distinction between the knower and the known. (Of course, the nature of that distinction is not at issue here. Once again, that issue is a complex one which would take us far into other matters than education.

It seems then that we are left with some basic components of education: it must be achievable; those engaged in learning must enjoy some kind of freedom to learn, to achieve or not to achieve what they are after; and those taking part in education as knowers must be distinguishable from what they are to learn or to come to know. These basic elements support our initial definition in the following manner: cooperative endeavors require free and active participants or it is not cooperation that we have at all; the development of capacities to cope with the world requires that such capacities *can be* developed, which *in this context* means that knowledge *can be* achieved, in principle.

(You may notice that I have assumed that coping with the world for human beings requires knowledge. And this is true; but to call it an assumption is to speak loosely. It is such a fundamental point that debate about it would be irrational, in most cases. Surely even minimal success by a child, say in building a sand castle, requires that this child know something about building such a castle. "Human vegetables" would not be said to be incapacitated if knowledge were not so essential a part of being able to cope with the world. Of course, knowledge alone may not do the job; still, it is a necessary element of it.)

Education also presumes that those being educated, the knowers, are different from what they are to be educated about, what they are to learn or to come to know; they cannot be the creators of what they know in the drastic sense, at least, in which solipsism would have it. Education without something to be educated about that is distinct from the one being educated would simply be something other than education. (though I could not tell you what it would be, inasmuch as such a view is simply beyond comprehension, even if seriously proposed by some thinkers).

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The question arises now whether the American educational system is consonant with some or all of these features of education; if it is, at least in most cases, then our troubles may have to do with matters other than education itself. If it is not, then improvements must be made within education itself in order to improve matters.

Most likely, however, troubles abound on many sides and contribute heavily to the overall picture we get of education in general. There is one area where education American style is certainly not consistent with the features which I have claimed were were essential for any educational endeavor. From the earliest stages, American students attend school independently of their choice. Elementary school students *must attend* schools and as things go, they must attend schools which have been built with the

support of people who must build schools. Which is to say, elementary education is compulsory and schools are financed by taxes, Even so-called private education in America has become a tax burden, for those financing it can abstain, to some extent from having to help finance other matters and as a result these other matters fall upon the rest of us for minancial support. It is, I think, fair to say that education in America has become a public enterprise, like the police, the military, the building of highways, and the delivery of mail. Except that if one does not want to write letters or receive them, one needn't, and if one wants to refrain from becoming a cop, one may. It is a bit different with the military, but even even in this there are avenues of escape. With going to school there is no escape—you *must.*

You probably know what I am going to say next. It has been said by others and it is being said by more people every day. To presume that one can conduct educational endeavors when parties to the action are forced to join the action flied in the face of what education must be. It makes little difference whether we conduct educational endeavors in pink houses, in fields of grass, or in barn yards. It makes no difference if we use books or take notes or write on blackboards; all these and similar matters are incidental and depend much on the particular context of a given educational undertaking undertaking. But it makes all the difference to whether someone is really receiving an education and participating in the educational enterprise whether he is *forced* or comes because he *wants* to.

Now it may be replied that children really have nothing to do with when they start their educational processes; it is the parents who would be forcing kids to enter school if the law refrained from doing doing so. This may be right, in some cases; but it is at least safe to say that without compulsory education some parents would be able to determine more accurately just when it is more appropriate to send their children to school than they are now able—since there is no question about the issue for parental decision. The issue may be put at least as follows: should the State or should the parents determine when a child should go to school? In terms of what I said earlier, the answer would depend on which method would ensure the least amount of compulsion within the various educational institutions available to children today.

Before we can consider the question raised above, it will be necessary to look at the other feature of American education which appears, at least, to violate the requirements of education proper previously established. This feature is the public or State supported character of U.S. education. I have already acknowledged that not all educational institutions are actually run and directly funded by governments. I have also noted that even private, elementary, secondary, and higher education, e.g., church and secular schools, receive special considerations from the State in the way of exemptions, deductions, etc. Thus when I include all American education in my characterization of them as public, I do so with good reason.

How do these two elements of our educational system pertain to the basic features I have argued education proper must involve? First, is there a connection between the need for free choice on students' part and the fact of compulsion in public education? Second, is there a connection between the possibility of exercising free choice and the publicly financed character of American education?

Compulsion in education amounts to the following: if a parent does not send his child to a State accredited educational facility (or obtain credentials to provide State approved educational procedures in his home to his children) at a prescribed age limit, the parent is liable to the punitive measures of the laws of the state. Fines, jail terms, suits of child neglect, and similar measures will be administered upon parents who refuse to comply with the compulsory provisions of education.

The fact that education is financed through taxation amounts to the following: all wage earners and property holders must finance American education on all levels such that the refusal to do so results in punitive measures against non-payers.

The question now arises, what if anything, does this result in for the education of children and the ability of parents to secure the education their children require? The compulsory feature of education has the consequence that a child must be *sent to* school at an age prescribed by law; the law in a democratic political system, assuming at least some approximation to the principle of majority rule (via "taxation with representation" which entails avenues of taxpayer control on all features of that area ofeducation which is financed by taxpayers), decides for each parent (and child) the correct age for school entry and attendance. The State decides, at least semi-democratically, what is good for children and parents—for, of course, the latter must also be considered when the family as a unit is being dealt with; the students are children, children, and children of some parents in most cases, one may surmise. At least one thing is clear: parents are forced to comply with the State's conception of what is right for their children, not regardful primarily of the individual characteristics, talents, needs, aspirations, interests, qualifications, etc. of any given child. Beyond this we will have to consider whether there need be any relationship between our educational crisis and the coercion of parents to live by the educational theories of the State (not to mention the factors of politics, bureaucracy, and majority decisions). For the time being, however, all that need be shown is that compulsory education limits the judgment and choice of individual parents in the matter of selecting the education or non-education of their children. (I am not, of course, arguing that outside the legal provisions no other harmful factors may influence a child's education).

When we combine the compulsory character of education with its public character, that is to say, with the fact that education is funded through the mechanism of taxation, with its corresponding features of politicalized administration as described above, additional matters arise. First of all, a parent has no choice but to finance public education. This entails that he may have to support a system of which he disapproves; and he will have less of an opportunity to finance his children's education through avenues which escape the State system. The chances for supplying alternative means of education by educators who wish to offer such means will also decrease. When the public is forced to support one system, the possibility for supporting another will be seriously limited. Thus non-State supported education is not only made less

available to the customer but, correspondingly, the producers of such education will have their entry into the market place of education restricted through the provisions of the legal system for tax financed education.

More important, perhaps, than the above is the State-funded education as accompanied by State-established standards for qualification as an educational institution proper. The case of the Amish people being physically forced into public schools bears this out most vividly, but, of course, there are less obvious examples than the Amish case we must take into consideration. Here we must remember that the evidence is not easily obtained, simply because much of what *might be* the case, were it possible and economical to provide private education, simply *is* not the case. Yet we can speculate intelligently about what might be and might have been the case without state education, with its compulsory and public character as it presently exists. An example of how things might be can be produced if we permit an analogy that is quite real.

Nursery schools, unlike all others, are still not under State supervision—though that is not entirely true either. Licensing provisions have been established even in this area. Yet nursery schools have the opportunity to experiment, to work on providing the best service, and to work on suiting special needs of special types of children without having to account for their actions to political bodies. In other words, the "taxpayers at large"—i.e., the State—need not be consulted.

One more factor to be considered is that with taxation as the source of finances for education, many pay for something from which they do not benefit in the way way those benefit who have children in school. Thus also, many have a *say* in education without the kind of stake those who have school aged children have in it. This itself indicates that the connection between education and those who are funding it is different from the connection between those who buy the services of non-tax supported producers and the product itself. The barber I pay to cut my hair works for me alone in our relationship; he is not committed to listen to and follow the rules others set for his job when he cuts my hair, even if my haircut is a concern to others. My psychiatrist or doctor (unless I am involved in some State financed medical care program) also treats me without having to answer to people who do not receive his services (though my health may indeed benefit others, just as education may have consequences for others than those who receive it).

Now the important question arises. Do all these features of American education aid or hinder the furtherence of those conditions which must accompany education proper?

We have already admitted that both parents parents and the State can use force to send children to schools. The former can do so, if he is allowed to, wisely or unwisely; he may consult the child, examine examine his needs, base his decision on this this examination, and change his mind in the light of improved knowledge; he may also default on this. If education were merely public but not compulsory, parents could keep their children out of schools as long as they choose, take them out when they choose, and so forth. Clearly if no compulsion existed and yet school would be provided for everyone at everyone's expense there would still exist financial pressures to utilize the public school system; the burden of supporting a private school would still be an addition to what has already been paid into the public system. Still, variations and experimentation to improve would increase. Also, it is unlikely that such a system could survive long: it would probably be considered unjust to tax everyone when many could legally keep children at home or send them to private schools. Under the compulsory system there is at least the double edged sword: kids *must attend* schools and schools *must be provided* for them to attend. This has the air of "justice" about it. If, on the other hand, education would be totally private and yet compulsory, a different problem would exist: in order to force everyone into schools it would be necessary to provide the schools; and there is no guarantee that the kind of education prescribed for everyone would be what private schools would choose to provide.

But what does this have to do with the relationship between State compulsion and education proper? If parents and State both coerce kids, why choose one over the other? This question can only be dealt with within the context of the total picture, namely compulsory, public financed educational practices. If we accept compulsion without public education, we are still left with coercion and the distinction between State education and total private education cannot be discerned. If we abolish compulsion but retain public education, we are still allowing a great deal of legal pressure favoring public education, namely the economic security provided by a guaranteed supply of funding.

First I want to establish the manner in which compulsion—either directly or via the existence of economic pressures established by law in favor of public education (though without necessarily involving outright compulsion)—affects education. The choice of schools must necessarily be limited when public education prevails; the choice of timing and circumstances must be limited when compulsion itself exists. Without either, a parent has the option to send the child to a school or instructor or tutor of his choice, not to send the child to school at all, or to send him for a time period the parent himself chooses. This would be the case even though different income groups would find themselves limited by different economic and other circumstances. Obviously, no one can argue that a free, privately provided educational system would guarantee the satisfaction of everyone's wishes. As an example, probably no one could provide the equivalent of an aristocratic tutorial education to those who cannot pay for it and even, sometime, for those who could: such a service would cost a great deal and may not even exist. But this is no argument against a free, private system—clearly there is far less of a chance for such quality education within the context of the present system. With the State, most of the parents have essentially one option open to them: to send the child to a public school within the context of the laws governing such matters as age, neighborhood, curriculum, physical facilities, space, etc. And within the American political system these conditions generally reflect the more-or-less-well-considered unhappy medium of judgments of voters, their representatives, and their appointees. There are, of course, variations from school to school, district to district, and state to state. But in all cases the resulting conditions are reflective of the collective decision of the politically active majority of voters (no doubt, with variations which can only be identified in retrospect in most cases).

Is there any important difference between the result of such State directed and supervised compulsion and the non-legal compulsion or direction parents carry out (or would have to carry out) in a free, private system? This difference would have to be more than simply the earlier established mere greater diversity of possibilities. For, one might ask, is there any special value of increasing opportunities for parents with respect to the education of their children? For instance, one may wonder if the option of not sending a child to school may not itself pose enough of a disadvantage for children in general to warrant opposition to a free, private educational system. Clearly in a free, private educational system this option would exist. (Not all educators are frightened of this. At the White House Conference on Children ninety experts suggested that being kept out of school may be better for some children educationally).

If it were a matter of what adults could do with their own lives perhaps no great problem would exist—though, of course, even with respect to adults the idea of freedom is often rejected in favor of "protecting people from themselves" (as, e.g., in drug laws, social security and unemployment compensation measures, and restrictions on the sale of pornographic entertainment). With this issue, however, we are talking about whether parents or the State should dictate the means by which a child is provided for in his need to become intellectually equipped to live his life well. So the question really amounts to whether in general the State or individual parents (or guardians) can best supply wha what children need.

We have already seen that a child, as pupil, needs to have his interests, talents, and circumstances consulted in order that the educational endeavor in which he may be involved should have the greatest chance for success. The freedom to attend to what is being taught him cannot be divorced from the conditions under which the child enters the educational endeavor. If he is forced into something that he would rather not be part of, the attitude with which he will approach this will differ from what it would have been had his interests and values been paid attention to in the first place. Granted that it is not always possible to discover what children want—they may not know it; they may even want something that is bad for them. So there will, undoubtedly, be some degree of compulsion in most children's education. The questions are: what kind is *better* for them; how can we determine this; and will parents not forced to send their children to public schools (a more or less universal type of educational program) pay more attention to these matters than the State does and can?

Here, I think, we have reached an important question: will people in freedom bring up their children better or worse than people whose lives are controlled by the educational system of the democratic process? The former will, to a great extent, be left to their own resources, individually, through voluntary cooperation. The latter will be freed from having to think too much about this matter except in so far as the relationship between their children and the political process makes possible. (There is absolutely no guarantee that taxpayers will demand what they want from their representatives, whether in education or something else. In fact, because of the relatively small significance of their own individual desires and decisions, alienation from the political process which leads to adverse results in publicly financed education or anything else is more likely. In that case the politically astute have the most to say about everything, whether they are qualified to say what is right or not—just so long as politics has something to do with the matter.)

Remembering, then, that in a free, private system, there is no guarantee that each child will receive what is good for him, and also that under the present system every child receives a uniform education whether or not it is *good for him,* the probability of better overall results for children under the free educational system seems to be clear. It is, after all, the *parents* of this or that child who will make the decision for the welfare of the child. These may not be excellent or even responsible at all times; but the relationship between parent and child, characterized at least by affection and some sense or a feeling of responsibility on the parents' part, has a good chance of resulting in maximum personal concern over education. Since no public education would be available and, therefore, no guarantee of at least some, however misconceived, education would exist, the decision about having children would also be checked. If a couple knows that it must take care of its offspring through its own efforts, the habit of bringing children into the world without caring what will happen to them would decrease considerably. Schools would improve, also, since they would need to gear their practice to the judgment of an ever critical clientele; the parent could take his child out of a school simply on the grounds that the child is not improving his life by attending it or because he judges the school to be bad. The child's needs, in terms of various conceptions of life-styles, morality, intellectual capacity, degree of knowledge and skills required for the many areas of the prevailing social, cultural, and economic circumstances, would play an important part in the minds of many parents--there would, after all, be no one to dictate by law *how* children must be educated. The conception of education advanced at the outset of this essay would have a chance to gain prevalence; those who, accordingly, would prefer an educational experience in which the interests, talents, and values of children are considered as priorities would have the chance to look for and build schools which shared this concern. Such schools would arise (as a matter of mere need) to supply what concerned parents demand. Not unlike the nursery school system we have, an appeal would be made to the public on the basis of the various conceptions of education which educators and administrators have. Communication between parent, child, and teacher would improve.And while all this would presume some degree of rationality on the parts of all concerned, including parents, children, and educators, the element of free choice on all sides would enable rational thought to become more and more pervasive.

Last, though certainly not least, there would be greater diversity of scholarship *and* ideology. Education, contrary to what what some think, cannot be divorced from from values. When the State runs education, values have to be suppressed in view of certain obvious fears all democracies have about using State run institutions for purposes of indoctrination. Since, however, one cannot separate fact from value, especially in such fields as history, literature, civics, law, economics, etc., such attempts at suppression must fail

and result in deception. Explicit indoctrination is eschewed, though the implicit favoring of certain views of life, morality, religion, politics, law, sexual behavior, etc. is evidenced throughout public education. The hypocrisy which overshadows the system adds to its other flaws and provokes resentment.

Free, (not financially, but politically) private education would make such hypocrisy unnecessary and, therefore, less prevalent. Schools, colleges, and universities could freely admit their commitment to certain views, be they controversial or not. Unlike governmentally run projects, which must refrain from violating the First Amendment, private institutions cannot be prevented by law from voicing their moral, religious, political, or other preferences. And while other sorts of pressures may exist, no doubt, they will be quite different from pressures which are backed by threats of legal punishment. (In a private system no problem about "prayer in school" could exist. Since uniformity is not enforced, changing from one school to another may solve the problem of clashes of values between family and school.) Here again the present nursery school system comes to mind. Such schools openly proclaim their adherence to certain moral, political, and educational values and advise parents of different persuasions to take their children elsewhere.

Ultimately the matter becomes, of course, an issue of one's view of human nature, morality, and the relationship between a citizen and his government. In America it would seem that the suggestion that freedom is better for people than coercion would be well received. Unfortunately, again, things don't always seem as they are.

In order to do full justice to the effects of government financing, running, and assisting of American education, we have to conduct some economic analysis. I am not an economist and will, therefore, like most of us, pick my favorite economists to testify in my behalf. One such economist/political scientist/ philosopher is E.G. West of Kent University, England. His book *Education and the State* and his article "The Political Economy of American Public School Legislation" (in *The Journal of Law and Economics,* October 1967) give evidence for the contention that neither was private education economically unfeasible, given the goal of providing the educational needs of Americans, when public education first became an established institution in the eary early 1800s, nor is it the case that private education could not accomplish the task of satisfying education needs today if public education were phased out. Needless to say, authority is not argument, so I would simply wish to claim that there is solid support for the above contention throughout the intellectual community. (Those interested in examining this issue with a view to making fundamental changes in the educational practices found in this country may find the best source The Center for Independent Education, 9115 East 13th, Wichita, Kansas 67206.) Incidentally, the idea that education should be severed from the state entirely was endorsed not only by such radical political philosophers as Ayn Rand, F.A. Harper, E.G. West, Henry M. Levin, Murray N. Rothbard, Herbert Spencer, Albert J. Nock, *et al,* all of them proponents of laissez-faire capitalism; but Oliver LaFarge (who openly challenged Ex-Harvard President Conant's denunciation of private schooling in *The Atlantic Monthly),* Ivan Illich (who argued in the *New York Review of Books* for an amendment to the U.S. Constitution which which would prohibit governmental interference with education), Professors Arman Alchian and James Buchanan (who argue again on economic grounds, that private education is better for us) and others, from various sides of the political spectrum, have held that governmental schooling is harmful. Though these individuals may not all be concerned with the overall violation of the principle of individual rights and object to public education incidentally, only, they are concerned, as are libertarians, about the consequences of public education. And these consequences must be measured against the definition of education offered at the outset of this article. What is important, then, ultimately, is whether pupils are being educated; whether schools, colleges, universities, and other educational institutions can provide what people need when they seek education. Ultimately it is the *pupil* who must be the concern of those interested in education. And by all counts (e.g., at the White House Conference on Children) it is the pupils who are complaining the most. They complain explicitly, though admittedly inarticulately; they complain implicitly, by acting so that one can observe that they have no love for education as it exists today.

I will not attempt to list all the symptoms of the disease. We hardly associate all things with matters I have been discussing; but in the classroom one cannot escape the fact that students are not excited about learning; they considere it a chore; they are in school mostly out of habit or duty or whatever, but rarely because they have developed a love for learning, a desire to cope with various subjects, an anticipation for the challange of tackling assignments which require intellectual effort. I think the experiences of most educators will bear this out. By the time students reach colleges and universities, the matter becomes *almost* irreversible. It is often embarrassing for a teacher to do his job because so much time must be spent on "turning people on." The atmosphere of give and take is virtually absent. This is not confined to such schools as junior and teachers' colleges, those, that is, which are traditionally *thought* to absorb students who are less facilitated in intellectual respects. The major universities are finding this problem to be all pervasive, too. Those who have analyzed the recent upheavals on our campuses do not, I think, do justice justice to the problems when they blame them on agitators, communists, extremists, extremists, administrators, or any single group. They will do justice to the problems only when they examine the total context of the American student's educational experience.

From the point of view of philosophy, there are a few additional remarks which should be made. First, we must examine our methodology of education. Here advances will depend on our conception of the relationship between pupil and the school. Here the conception of knowledge as a static picture, pieces of information or data, can only work against the task of bringing pupils out of ignorance, though for indoctrination such a conception is appropriate. Knowledge is possible; but it is not something stale and fixed. To acquire knowledge it is necessary that the student's mind be active; it is, perhaps, more important to cultivate the intellectually active feature of the educational process than what it results in, namely the knowledge of facts. Here again removal of politics would work for the good.

Those who argue about whether pure intellectual *effort* or *experience* fosters learning are only obscuring the very important fact that neither of these *alone* can produce anything educationally worthwhile: experience without intellectual participation may produce a mind which works like a camera—it records uninterpreted pictures; at the same time, thinking without paying attention to material about which thinking is to be done produces theoretical machines which cannot be employed in practice. Man needs both his mind and the world in order to know.

It is impossible to end this story, of course. Much work has to be done in order to produce something that will lead to progress in the field of education. At the base of it all, however, must lie concern for the most prominent parts of education, namely pupils capable of learning and teachers bent on teaching. It is these which lie at the center of any fruitful investigation of educational theory. Questions about techniques to be used to promote knowledge of mathematics or about the methods to be pursued to *provide* any kind of educational services must not lose sight of the purpose of education, namely assisting a young person to become able to lead a fruitful human life.

My views on this matter have been called naïve. I appreciate the fears of pragmatists and realists in dealing with hypotheses which are not likely to gain immediate popular support. And no one will argue that the suggestion of freeing education from the State is going to get wide reception among our politicians, academicians, or humanists. The first like to have some control over the population by way of education, though I am sure many believe they are doing noble things forcing kids into schools indiscriminately and forcing people to pay for any or all kinds of schooling equally indiscriminately. The second have really never considered the plausibility of free education—just as some people never even thought of abolishing slavery: were not at least some of the slaves very happy? Humanists—and there are many among politicians and educators—feel that they will hurt the poor by abolishing public education. It is only the latter who, I think, deserve an answer.

Will the poor suffer most from making education private? From what we know about what education does for poor children, taking into account the kind of teachers who teach at poor neighborhood schools, the monies available to such schools, the political football-playing done with such schools, and the time consuming attention the parents at such schools would have to pay to the political maneuverings necessary to be informed about their childrens' education—in all this and more there is no ground for the contention that privatizing education will hurt the education of poor students, Quite the contrary; it has been argued convincingly that poor children are badly hurt by waht what compulsory education does for (to) them, on the whole. They are the ones who get most "turned off" to intellectual matters. They become anti-intellectual and hostile toward matters of the mind. One need only consult the books Holt, Silberman, Dennison, and others have written recently to become convinced of this. Actually one need only look at the students of his local elementary and high schools; the poor gain very little, if anything at all. Just *ask them.*

Furthermore, when we come to colleges, it has been shown that the poor are in fact financing the education of the rich. *TransAction* magazine —not a right or left wing radical journal—investigated who is funding whose college education, and in California the "superrich" have to pay least, proportionately, while the "superpoor" pay the most when their tax rates and educational costs are tabulated. (See the TRENDS column in this issue). So the humanists may rest assured that no one here is forgetting the poor child; it is, in fact, because of what is happening to him and to all other children and young people that the proposals and suggestions of this article are made.

Perhaps eventually they will be considered seriously and something may even happen that will foster real education in America. As of now, it seems, that many have only learned about the disease—hardly anyone in educational theory expresses satisfaction with the present system. But the political and economic sophistication of educational theorists and administrators is minimal, unfortunately. Instead of urging the freeing of education, many are simply demanding more money and more State intervention. The question is, will they ever seriously examine a truly radical proposal, such as that offered by free market economists and libertarian educational theorists? Or will they simply talk up their dissatisfactions, thereby affecting serious concern without paying serious attention to, the problem?

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the case FOR education vouchers

ROBERT POOLE, JR

Imagine a society in which children attend school because they enjoy it rather than because "the law says so"; in which parents carefully choose from a variety of alternatives the type of school best suited to each of their children and willingly paid for it, recognizing that such is their responsibility as parents. Imagine a society in which education is more than just sitting in rows in a classroom for 12 to 16 years, where it is an integral, lifelong part of living, made exciting and relevant by a widely diversified, creative industry. Sadly, you haven't been thinking of America.

In America, as Charles E. Silberman[1] has observed:
"It is not possible to spend any prolonged period visiting public schools without being appalled by the mutilation visible everywhere: mutilation of spontaneity, of joy in learning, of pleasure in creating, of sense of self. . . .

Because adults take the schools so much for granted, they fail to appreciate what grim, joyless places most American schools are, how oppressive and petty are the rules by which they are governed, how intellectually sterile and aesthetically barren the atmosphere, what an appalling lack of civility obtains on the part of teachers and principals, what contempt they unconsciously display for children as children."[2]

A large part of the problem relates to the bureaucratic nature of the public school system, especially in the cities. In an article entitled "Is the Public School Obsolete?" Christopher Jencks, characterizing the "organizational sclerosis" of the public schools, described big-city schools as "a system of education whose first axiom is that *everyone*, on every level, is incompetent and irresponsible."[3] As a result,

". . . the school board has no faith in the central administration, the central administration has no faith in the principals, the principals have no faith in the teachers, and the teachers have no faith in the students. Decision-making is constantly centralized into as few hands as possible, in the hope of reducing errors to a minimum. Of course, such a system also reduces individual initiative to a minimum, but that is the price which a publicly-controlled bureaucracy, whose aim is not profits but survival, usually seems willing to pay."[4]

Jencks goes on to describe the ways in which the system tends to encourage conformity and docility, while discouraging innovation and creativity, among teachers, administrators, and students. Another factor suppressing innovation is public control—"the minute accountability to publicity-hungry elected officials" that puts a premium on being non-controversial.

Despite recurrent hopes of reformers, given such constraints it is unrealistic to expect meaningful change to occur within the existing system. The natural tendency of a bureaucracy is to defend and perpetuate itself, to resist all fundamental change. A business which does this eventually goes bankrupt. . .unless as Jencks points out, it can get the State to protect it from competition through a legally enforced monopoly. This, of course, is precisely what the public school system is all about. The tax system, by forcing the poor and the middle class to pay for public schools even if they desire to patronize other schools, effectively prices other schools out of the market.

This analysis of the source of the public schools' problems is not new; Milton Friedman and other libertarian economists have been making these points for years. What is new, however, is for non-libertarians like Jencks and Howard Levin to be offering the same analysis, and getting widespread publicity (and OEO grants) in the bargain. The glaring deficiencies of the present system are becoming so obvious that even *Time* is touting the Jencks-Friedman thesis.[5]

To break the public schools' monopoly and restore competition in education, Friedman has proposed,[6] and Jencks endorsed, a plan called the "voucher system." Under the system, the government in a given area would compute its average ~~pre~~-student school expenditure, based on the existing tax structure, and issue to parents a voucher for each of their children. The voucher would have a cash value equal to the average per-student expenditure and could be offered to a school—*any* school—as tuition. The effects of such a system would be revoluntionary. Overnight, a real market for educational services would be created, with all the usual advantages of a market—differentiation of product and services, specialization, a range of prices, etc. Moreover, because parents would have a choice to make, they would be motivated to examine the quality of education which various schools had to offer.

Even more important than changing the economics of education, vouchers would begin to change people's attitudes toward education. Education has been a virtual state monopoly for so long that we now tend to confuse *schooling* with *education* and to sanctify the former as the only conceivable means of becoming educated. Thus, we regard 12 to 16 years of schooling as the means by which a person acquires the knowledge and abilities required for his life. In reality, there may be at least two things wrong with this assumption: the years may have been spent primarily "serving time,"

fulfilling society's expectations; and, the education in an advanced technological society is a need continuing throughout one's active yeats of life, not something one "does" once and so gets it out of the way.

By restoring the connection between payment and services received, the voucher system may go a long way toward reorienting people's way of looking at education. Viewing education as a service—as something to be selected and purchased in response to one's particular needs—would be a profound cultural change.

Another advantage would be the partial restoration to the parents of the responsibility for seeing that their offspring were adequately provided for—by them. To be sure, under the voucher system, the money would still be collected by the State as taxes; but by making payments for each child's education, by evaluating cost and quality of the services thus purchased, parents would cease to regard education as a free good, provided by "society" without cost. Ultimately a non-coercive halt to overpopulation can only come about when all parents assume full responsibility for their children. Full responsibility would automatically limit parents breeding to their ability to feed, cothe, and educate their offspring. But parents cannot make such decisions unless they are fully aware of all the costs involved in child-rearing. In treating education as a free good, we hide its cost from parents, particularly poor parents. Full-cost pricing, by means of vouchers, is therefore an important first step in making the cost of education visible to parents on a personal, yearly basis. Only after people have become accustomed to paying for their children's education can we begin to talk to them about fulfilling their responsibility to provide all funds themselves.

Some Libertarian Objections

Despite these advantages, there are, from a libertarian viewpoint, several substantive objections to the voucher idea. First, it can be argued that vouchers don't really change the fundamental injustice of public education—taxation of everyone to pay for the education of the few. If any change should be worked for, these critics contend, it should be to give tax exemption to those who opt out of the public school system in favor of private schools (or to everyone except those with children in public schools). Morally, this plan is indeed preferable to vouchers, insofar as it would be a step in the direction of reduced coercion; a significant number of people would retain the use of a non-trivial portion of their income, to spend on private schools (if parents) or however they wished. Yet overall, this solution is is a poor one, for several reasons. Its single most important defect is that it is politically unfeasible, given the political context of present-day America. The liberal and educational establishments are the holders of the effective power to determine the fate of any educational reform proposal, and their primary concern is to preserve the wealth-transfer aspect of public schooling, i.e., to assure that the wealthy and childless are taxed to provide schools for the poor and prolific.

By this criterion, a tax-exemption plan is doomed to failure, whereas a voucher system has a good chance of success. Although vouchers will not change the basic concept of educational funding, they will, for the reasons outlined above, cause a radical change in the nature of educational institutions which in turn will encourage a radical change in people's attitudes. It is the latter which may *eventually* make possible a change in the method of funding. The imperative is to break the State's educational monopoly and the voucher plan is the only politically feasible way of doing this.

Another possible libertarian objection concerns the issue of religious schools. Under a voucher system, education vouchers would be redeemable at any school, including present-day parochial schools. To those libertarians who have spent years fighting to preserve separation of church and state, this could prove to be unsettling. Yet the voucher is not, in and of itself, a subsidy of religion. It is the parent, not the State, who supports religion by his choice to spend his voucher at a religious school. The *existing* public school system rather significantly violates the "free exercise of religion" clause of the First Amendmetn by forcing parents who currently choose religious schools *also* to pay for public schools. Thus, a voucher system would be more consistent with the "free exercise" clause, while not violating the "establishment" clause.[7]

One further libertarian objection to the voucher plan is the issue of state control. It can be argued with some justification that even if a voucher plan can be set up, the governing authorities who formerly exercised power through control of public schools will seek to impose stringent regulations on the policies and curricula of free-market schools in the name of "minimum standards." Even if such standards are initially designed only to prevent obvious charlatans and racists from opening "schools" offering little, if any, education, the natural tendency will be for those in power to exercise increasing control over the schools. The threat of cutting off voucher eligibility will act, then, as a potent persuader.

The only answer to this objection is to acknowledge that it is a very real danger that must be strongly resisted. It should be noted, though that State control over current policies and curriculum is *total*, so that in no case could the situation under a voucher system be worse. In fact, it should be substantially better. Countering the increasing tencency toward greater control will be the inherent dynamics of competition and technological change. As new methods of teaching are developed and proven effective, there will be increasingly powerful consumer demands, acting to oppose State control. Although State regulation must be staunchly resisted, it should not be feared; the market should be sufficient largely to offset repression.

Hopefully, the preceding arguments have established the desirability of the voucher plan as the best available means to the end of establishing a market structure in education and thereby developing a general acceptance of the concept of *education* as a *service* industry, from which one purchases desired amounts of assistance. It has been argued that these changes in market structure and attitude are a necessary prerequisite for acceptance of the idea of full parental responsibility for children and the resulting impact on our concepts of welfare and the population problem. Given, then, the desirability of the voucher plan, what must be done to foster its acceptance by those in power?

The educational establishment fears all steps in the direction of a free market, not merely because they threaten its power but also because of some serious misunderstandings of the workings of the market. Thus, one hears arguments that free-market schools are undesirable because they will increase segregation, because some will be operated by fly-by-night hucksters, or that (even if competent) such schools will widen the gap between the rich and the poor. In response response to these fears, some backers of the voucher, like Jencks, are attempting to attach a multitude of restrictions to their proposals,[8] most of which will hinder the market mechanism and weaken the basic vurtues of the plan. Hence, there is a need for those with an under-

standing of the free market—the libertarian economic community—to explain in some detail why the above fears are exaggerated or beside the point and how a free market in education would actually deal with these problems.

The segregation issue is relatively easy to dispose of. In the first place, there is a good deal of evidence that an official *policy* of racial segregation in a voucher program, or in a participating school, would be found unconstitutional. Several southern states have attempted to set up voucher-like programs as a way of avoiding court-ordered integration and have had the plans declared unconstitutional by federal courts.[9] Obviously, since a government agency would be making the funds available, the courts could easily require that the vouchers not be cashable at openly racist institutions.

On the other hand, what about *de facto* racial segregation—situations in which certain schools "happened" to have an enrollment of largely or exclusively one ethnic group, due to housing patterns, teaching methods, type of programs, etc.? It is at this point that the libertarian must draw the line and part company with those ideologues who insist that a child is irreparably deprived if he does not attend school in a "racially-balanced" environment. *De-facto* segregation could indeed occur under a voucher system, but there is no evidence to indicate that this would be harmful; on the contrary, it appears more likely that the opposite would be the case.

First of all, the Coleman report data comparing Negro pupil test scores found that integration produced mixed results; more often than not there was an increase of several percent for Negro pupils in schools with a majority of whites, but in some cases the scores actually went down several percent.[10] These data, of course, are based on existing *public* schools, in which the black or largely black schools are generally older, understaffed, overcrowded, and uncreative. It is hardly surprising that children taken from an under-equipped, isolated ghetto school and placed in a comparatively healthy environment will show a small increase in test performance. But this sort of comparison is not directly applicable to the voucher plan. Under a voucher system, well-funded, professionally-run schools, both racially balanced and unbalanced, will exist; only under these conditions will a meaningful evaluation of the effect of racial balance be possible.

The advocates of racial balance seem still to be thinking in public-school terms when they criticize potential *de facto* segregation in voucher schools. By definition, a *public* school is supposed to provide a generalized education for all of the community—to be "all things to all people." In contrast, the hallmark of a free market is *specialization,* the tailoring of specific schools to specific needs. A public school generally holds what amounts to an exclusive franchise (monopoly)on providing education for a given geographical area; a free market, however, could provide a number of smaller schools serving the same area, each specializing in serving the specific needs of a segment of the market. Thus, there might be a school stressing black pride and black history (which would probably end up—*de facto*—black), one featuring the Montessori method, another for Hassidic Jews, another in which Spanish was the primary language, serving Puerto Ricans or Mexican-Americans—all in the same general area.

Powerful support for the voucher system may come from black leaders like CORE's Roy Innis who are stressing the need for black people to gain an increased sense of self and control over their own lives, resources, and schools. Support for the goal of integration into the white world is gradually becoming the exclusive property of the liberals. The (black) head of the Justice Department's community relations service now considers integration "unrealistic and unwise," arguing instead for "a multiracial society in which we have black neighborhoods and black communities and still live as one nation."[11]

Last spring when a federal judge ordered the Los Angeles school system to achieve racial balance by fall 1970, the loudest protests were from Mexican-American groups who had been painstakingly building up ethnic programs in the public schools of their neighborhoods. Now this specialization must give way to the court-ordered melting pot. Much the same thing is happening to the newly-integrated black students in many parts of the South, where the public school systems are, of course, still under the control of the white majority. The old hatreds and prejudice continue, but in less direct fashion—such as separate classrooms, lunch periods, and gym classes for blacks, or large-scale demotion or transfer of black teachers.[12]

In short, the goal of decent, quality education for all is not being met by the monolithic, monopolistic public school approach. It demands the decentralization and specialization that are the natural characteristics of a free market. Far from being a disadvantage of vouchers, such *de-facto* segregation as will occur will be an improvement over present conditions for those involved.

A second fear is that many free-market schools would be of inferior quality, operated by fast-buck promoters who would fleece the poor. Those who raise these fears cite the generally higher prices and lower quality of merchandise sold in the ghetto today. There are several answers to this fear. One is to point out that the rising level of consciousness and community involvement in ghetto areas—the demands for local control—will mitigate strongly against outsiders being able to get away with any sort of educational hucksterism. Increasing mass-media involvement in the plight of the poor is sure to focus more attention on *new* ventures like free-market schools than has been focused on shoddy stores which have existed for decades as part of the background, thereby increasing the parents' access to information about what sort of schooling the market makes available in the area.

An other answer is that comparison with the sale of other goods and services is not completely legitimate, since the existence of the vouchers will produce a guaranteed demand and ability to pay for educational services. This type of market will attract competition for the voucher dollars—something which is all too often lacking in the ghetto because of the generally lower demand for goods and services there. Nothing can *guarantee* the absence of hucksters from the field, but, in short, fears on this subject seem to be greatly out of proportion to the actual danger.

The final (and most important) fear raised by the educational establishment is that under a voucher system the gap between the poor and the rest of society would increase. This fear is based partly on the contention that increased *de facto* segregation is necessarily harmful (shown above to be false) and partly on the contention that there would be fewer sellers of education in the ghetto, offering lower quality education than elsewhere, because the costs of providing education there would be higher. This objection has led Jencks and others to propose that vouchers given to the poor should have a higher redemption value than other

vouchers and that parents be forbidden to supplement vouchers with cash payments out of their own pocket.[13] These restrictions are both unwise and unnecessary.

The prohibition against parents' supplementing the value of the voucher is intended to prevent the development of higher-cost schools catering to middle and upper-income families. In fact, such a rule is economically absurd in the real world; how on earth could the costs of all schools, each using different methods and technologies and dealing with different problems, be identical, such that the voucher would just cover the cost at all schools? Precisely *because* of the diversity and specialization that would occur, the cost of education would vary widely, with some schools vying for the unsupplemented voucher market by concentrating on efficiency and cost-saving methods and technology and others specializing in higher-cost programs for problem children, gifted children, etc. Moreover, as Harvard educational economist C. S. Benson points out, the ability to supplement, even by small sums, the amount of the voucher to meet the particular needs of one child in a family, or in response to an increase in family income, is one of the prime advantages of the voucher system.[14] Today, parents are faced with the choice of "free" public school or a very expensive private school. An unrestricted voucher system opens up a continuum of cost alternatives for parents, from the basic voucher level on up in steps of what ever amount they can afford.

The other contention—that vouchers should have a higher value in the ghetto because of higher costs—also bears examination. For one thing, most educators and psychologists who have studied the problems of ghetto schooling agree that ghetto children start their school career with much less "educational investment" from their parents and environment than non-ghetto children. Furthermore, Stanford education professor Henry Levin points out, the less education a child has, the more effect each additional dollar spent on education will have, other things being equal. This being the case, "the marginal returns in future productivity from investing in the schooling of the poor will be greater than those which might be derived from spending the same amount on basic schooling for the advantaged."[15] Thus, educational dollars spent in the ghetto are relatively more powerful than the same dollars spent in suburbia. At present, American public schools generally spend an average of *twice* as much on educating children of the rich as on children of the poor[16] (partly because of higher expenditures and partly because the rich stay in school longer). Under the voucher system, since the voucher's value will equal the annual per-student educational expenditure, the level of spending in the ghetto will automatically be *higher* than it is now. Moreover, since the marginal returns from these (higher) expenditures will be greater in the ghetto than elsewhere, the need to have a higher-value voucher in the ghetto seems less than compelling.

A more serious objection to this contention is that it implicitly assumes ("other things being equal") that educational quality is equivalent to the dollar value of expenditure. While it is undeniable that certain technological devices are expensive, there is no inherent reason why quality education in the ghetto need be particularly expensive (even though this is "obvious" to a school board bureaucrat). Certainly, if you define a school to be a certain size brick building with many classrooms, each housing a teacher, a blackboard, and pupils sitting in straight rows—then it may cost more to ~~build~~, staff, and operate "schools" in some areas than in others. This, however, says nothing about whether *education* need cost more in the ghetto.

Even *within* the public school environment there are occasional innovations which demonstrate that education can be better provided without the massive costs common to most schools today. John Bremer, a 42-year-old British educator, has set up a remarkable high school in Philadelphia known as the Parkway Program[17]—the "school without walls." Bremer contends that "learning is not something that goes on only in special places called classrooms or in special buildings called schools; rather, it is a quality of life appropriate to any and every phase of human existence."[18] Consequently, Parkway students have no school building but rely on the city's museums, libraries, shops, and businesses for "classrooms." There is some formal instruction in offices and apartments of the instructors, but most of the learning takes place out in the real world. The average student-faculty ratio is less than 8 to 1, with an average class size of 15. Parkway students are given a large amount of freedom—to stay home, to smoke, to swear, etc.—with the result that not only are they learning and maturing more rapidly than most high schoolers, but discipline problems, racial incidents, and hard-drug use are practically non-existent. Yet all of this costs only a fraction of what conventional high schools costs, because of the absence of a massive, impressive school building.

Another example is the work of George Dennison, described in his book *The Lives of Children.*[19] Dennison, funded by, but operating outside the regulations of the public system, took on the task of educating a group of "hard-core dropouts," described by the school bureaucracy as "unteachable." Dennison's ability to understand the youths and to see things from their viewpoint (much as John Holt does) enabled him to succeed in motivating them to the point of voluntary perfect attendance. Needless to ~~sya~~, the children learned and rejoined society. All of this was accomplished on a shoestring, with facilities no more elegant than an old rented building.

The Parkway Program and Dennison's work serve to reemphasize the point that schooling and learning are not necessarily the same thing. Largely due to the State's monopoly on both the funds and the resources for education, we have allowed "schools" in the sense of rigid, formal institutions to assume increasingly the sole responsibility for teaching in our society. The more we do this, the more we discourage self-study and self-responsibility and the more we come to depend upon credentials and diplomas rather than demonstrated competence and ability. To a certain extent, as Ivan Illich noted,[20] we have made universal, obligatory schooling schooling into a new kind of secular religion, complete with temples, priesthood, and initiation rites.

The education establishment has confused *process* with *substance* in fearing that ghetto children will not be adequately educated unless more is spent on ghetto schools than is spent elsewhere. The voucher system provides a chance to look "outside the box" for better solutions to the problems of teaching and learning. As Holt, Kozol, Silberman, and Dennison have found out, our traditional, mindless, authoritarian notions of schooling do not work, particularly in the ghetto. The authoritarian notions of schooling do not work, particularly in the ghetto. The *last* thing these children need is more and more of the same—more glass and steel temples patrolled by armed policemen, more teachers with advanced degrees spending most of their time trying to maintain "order" and stifle inquiry. What we do need, instead, is diversity, decentralization, and *disestablishment.*

As Illich puts it:

"Two centuries ago the U.S. led the world in a movement to disestablish the monopoly of a single church. Now we need the constitutional disestablishment of the monopoly of the school. . . . The first article of a bill of rights for a modern, humanist society would correspond to the first amendment to the U.S. Constitution: 'The State shall make no law with respect to the establishment of education.'"[21]

Education vouchers will not accomplish this overnight. But, if allowed to operate unhampered by either the educational establishment or by well-meaning advocates, education vouchers can provide the vital first step in freeing education from the state. In so doing, we can begin to restore education to its rightful place as an integral part of our lives.

FOOTNOTES

1. Silberman, Charles E. *CRISIS IN THE CLASSROOM* (New York: Random House, 1970).

2. Silberman, Charles E. "Murder in the Schoolroom," Part 1, *THE ATLANTIC,* June, 1970, p. 83.

3. Jencks, Christopher "Is the Public School Obsolete?" *THE PUBLIC INTEREST,* Winter 1966, p. 22.

4. *Ibid.*

5. Friedman, Milton "The Role of Government in Education," Robert A. Solo (ed.), *ECONOMICS AND THE PUBLIC INTEREST,* (New Brunswick, New Jersey: Rutgers University Press, 1955).

6. Friedman, Milton *CAPITALISM AND FREEDOM* (Chicago: University of Chicago Press, 1962), Chapter 7.

7. For a further discussion of the constitutional issues, see Appendix A of *EDUCATION VOUCHERS* (Cambridge, Massachusetts: Center for the Study of Public Policy, March 1970).

8. Jencks, Christopher "Education Vouchers," *THE NEW REPUBLIC,* 4 July 1970, pp. 19-21.

9. Cf. Appendix B of *EDUCATION VOUCHERS, op. cit.*

10. Coleman, James S. (ed.) *EQUALITY OF EDUCATIONAL OPPORTUNITY* (Washington, D.C.: Office of Education, U.S. Department of Health, Education, and Welfare, 1966), p. 332.

11. "Does Integration Still Matter to Blacks?" *TIME,* 9 March 1970, p. 14.

12. "The Bad Side of Integration," *TIME,* 13 July 1970, p. 32.

13. *EDUCATION VOUCHERS, op. cit.*

14. Benson, C. S. *THE ECONOMICS OF PUBLIC EDUCATION* (Boston: Houghton Mifflin, 1961), pp. 327-8.

15. Levin, Henry M. "The Failure of the Public School and the Free Market Remedy," *THE URBAN REVIEW* (reprinted by The Center for Independnet Education, Wichita, Kansas), p. 9.

16. Jencks, Christopher "Is the Public School Obsolete?" *op. cit.*

17. "The Parkway Experiment," *TIME,* 23 March 1970, p. 55.

18. Silberman, Charles E. "Murder in the Schoolroom," Part 3, *THE ATLANTIC,* August 1970, p. 95.

19. Dennison, George *THE LIVES OF CHILDREN* (New York: Random House, 1969).

20. Illich, Ivan "Why We Must Abolish Schooling," *THE NEW YORK REVIEW OF BOOKS,* 2 July 1970, pp. 9-15.

21. *Ibid.,* p. 11.

FREEDOM AND EDUCATION

One had to cram all this stuff into one's mind, whether one liked it or not. This coercion had such a deterring effect that, after I had passed the final examination, I found the consideration of any scientific problems distasteful to me for an entire year....

...It is in fact nothing short of a miracle that the modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry; for this delicate little plant, aside from stimulation, stands mainly in need of freedom; without this it goes to wrack and ruin without fail. It is a very grave mistake to think that the enjoyment of seeing and searching can be promoted by means of coercion and a sense of duty. To the contrary, I believe that it would be possible to rob even a healthy beast of prey of it's voraciousness, if it were possible, with the aid of a whip, to force the beast to devour continuously, even when not hungry—especially if the food, handed out under such coercion, were to be selected accordingly.

—Albert Einstein
(quoted in Examining
in Harvard College)

THE CASE FOR EDUCATION VOUCHERS
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the case AGAINST education vouchers

GEORGE PEARSON

An ever more popular idea is the idea of government financing of private education. In the present controversy on the merits of government financing of private education, the advocates have often failed to consider adequately the consequences of such financing. It is the purpose of this paper to consider what the application of tax funds to private education might entail.

The precedents allowing government funding of private education have been established in a number of Supreme Court decisions. In the major cases, *Quick Bear vs. Leupp*[1] allowed federal funds to be applied to salaries and maintenance of a parochial school. *Everson vs. Board of Education.* upheld state provision of textbooks to students in religious schools.

The most recent push for public support of non-public education is in the form of educational vouchers (state support provided to parents for use in purchasing education for their children, Education vouchers are favored over tax credits (a credit for the student's education against the parent's tax liability) for two reasons: first, the tax credit is not available to the poor to the same extent it is to the more affluent; second, with taxes being due at a different time from tuition, a tax credit might create a cash flow problem. These arguments against the tax credit and a fairly comprehensive case for education vouchers have been presented in a report entitled *Education Vouchers* and published in March 1970 by the Center for the Study of Public Policy in Cambridge, Massachusetts.

This report, dealing with the most pronounced objections to voucher payments, is by no means the first effort to advance a proposal for government financing of education by channeling money to the parents. Some 200 years ago, the classical economist Adam Smith wanted the government to give parents the money to hire teachers, and for the last fifteen years, Dr. Milton Friedman of the University of Chicago, a leading voucher advocate, has attempted to popularize the argument.

The efforts have succeeded, and, as recently as May 1970, the Office of Economic Opportunity announced that the scheme would be tried.

In the initial attempt, the first step is the establishment of an Educational Voucher Agency in a chosen community. This agency, instead of the school board, will receive the federal, state, and local tax money for the financing of the education of all the children in the community. The Agency will dispense these funds in the form of a voucher to the parent, who, in order to redeem it, will necessarily have to take it to a school which meets the basic eligibility requirements. An important question, obviously, arises as to who will determine these eligibility requirements.

In this experiment, OEO is "contemplating [among other regulations] extremely stringent controls placed on participating schools' adminsions policies and also on tuition charges." The admissions policy being considered would require participating schools with more openings than applicants to admit all applicants, and schools with more applicants than openings to admit a certain percentage of their students, say fifty, randomly. The control on tuition charges also being considered would not allow a school to charge tuition in addition to the voucher amount. "At the same time, it is hoped that minimal restraints will be placed on the schools' staffing practices and programs."[4] From this, it would be safe to say that federal direction, if not control, of education activities is possible and can be anticipated.

The lesson that history teaches of government intervention is one of caution and forewarning. It makes little difference whether the Federal government supplies 6.4 percent of the public school support, as claimed by the National Education Association, or a much larger percentage. The precedent has been established and reasserted again and again—"it is hardly lack of due process for the government to regulate that which it subsidizes."[5]

In addition to this degree of federal regulation, one can safely predict a certain amount of state regulation. In Connecticut for example, some of the restrictions on the non-public schools receiving state aid are: 1) teacher certification—all teachers must be certified by the State Board of Education within three years; 2) textbook standardization —all textbooks must meet the same standard as the public school's texts; 3) all non-public schools must be approved by the State Secretary of Public Education as complying with regulations making the educational standards the same as those applying to public schools (Sec. 10-220 of the General Statutes); 4) all schools must be non-profit; 5) all schools must have open

enrollment, meaning admissions to *any* qualified student; 6) and, of course, all schools must comply with a secular education (teaching that may "indoctrinate, promote, or prefer a religious or demonimational tenet and doctrine") restriction.

The extent to which these or similar state restrictions coupled with Federal regulations erode the independence of the school which becomes a non-public voucher payment recipient should be carefully examined.

First, if a non-public school has a policy of employing teachers from candidates with degrees in the subject matter to be taught, then, in order to receive the voucher, the school must accept the state's emphasis on training over its preference for knowledge and depth in subject matter.

Second, textbook standardization is an important loss of freedom to the school that desires to remain independent. Christopher Jencks, a familiar name in the voucher dispute and an Associate Professor of Education at the Harvard School of Education, refers to "teaching and learning as a subtle process that resists all attempts at improvement by formal regulation."

Extensive interference into these similar critical areas of teacher and textbook selection is cause for deep concern. Not only is the school subject to current standards, but also to any future whims of those deciding educational policy. As the voucher arugment is premised, the possibility of being more competitive depends upon the option to be different. Without difference, there is, of course, no competition. Excluding those teachers who do not have certain credentials, no matter how well grounded they are in the subject matter or how capable they are at teaching students, narrows the range of choice and effectively reduces competition. Limiting the material available to teachers, no matter how worthy of the students' consideration it may be, also precludes competition.

Third, not being allowed to operate as a proprietary school is a point that many private schools, and certainly, all proprietary schools may not wish to concede. A U.S. District Court decision *(Marjorie Webster Junior College, Inc. vs. the Middle States Association of Colleges and Secondary Schools, Inc.)* may have effectively guaranteed schools the option of being non-profit or proprietary; however, that decision has been reversed by a higher court and to many the issue is, at this time, still considered unresolved.

Fourth, between the states' open enrollment policy and the Federal Government's open admissions policy, the strongest and primary argument for vouchers (i.e., reduce the suppression of government's monopoly and open the schools to competition) seems lost.

The necessity of each school to compete with other schools for the favor of the parent-child combination is an attractive idea. To have a flow of customers into each school determined by that school's ability to offer a program that most nearly meets the demands and desires of the parent and child is an argument that has understandably won much support for the voucher. But if this flow is to be regulated, the competitive element is neutralized, and regulation will predictably result in more of the same stagnation that hinders schools today.

Not to be overlooked is the Federal Government's regulation of tuition charges. Schools are compelled to charge the voucher amount although some schools may wish to charge more than allowed so they can offer more than their competitor, and some parents may wish to supplement the amount of the voucher with their own funds in order to have their children receive more. Here again, regulation will result in the leveling and equalizing of all school offerings, and with the vital competitive element being smothered, generally all tuition can be expected to rise.

Fifth, pleasing the State Secretary or Superintendent of Public Education could conceivably place the school more at the mercy of the politician than under the influence of the educator.

All of these areas of State Government control are not unique to Connecticut. At the time of the publication of *Education Vouchers,* three other schools had adopted programs of state aid to private education. Of these four (Connecticut, Ohio,[7] Pennsylvania,[8] and Rhode Island[9]) all required teacher certification, textbook standardization, disclosure of accounting and/or financial records, compliance with the Civil Rights Act of 1964 or Article 7 of Executive Directive No. 21, and secular education restrictions.

Connecticut, Ohio, and Rhode Island specified that materials used must be equivalent to materials used in public schools, and Ohio further specified that "materials and programs cannot exceed in cost or quality such services as are provided by the public schools." Connecticut and Rhode Island disallowed the receipt of tax monies by other than non-profit schools.

This list of restrictions is not comprehensive. Many other restrictions were included in the legislation passed in these four states, and still other restrictions are proposed in states that have state aid to private education legislation pending.

There is every reason to expect such regulation in voucher programs. The proponents of vouchers believe them to be a "foot-in-the-door," "a step in the right direction." The opponents, unable to rebut the arguments for more competition and greater parental interest, resist on the grounds of not wishing to fund an unregulated program. Predictably, the results will be a compromise, and if the OEO experiment is a representative indication, the compromise will result in a voucher system with "extremely stringent controls," one that will satisfy neither side.

Christopher Jencks recognizes the possibility of a regulating agency evolving into a political force strong enough to result in a "regulatory system as complex and detailed as that now governing the public schools. . . they (the schools receiving the vouchers) would probably end up indistinguishable from existing public schools." Commenting on the consequences should such a possibility materialize, he casually states, "nothing would have changed either for better or for worse." Unfortunately, Professor Jencks overlooks a most important factor—independent schools will have lost their independence.

1. 210 U.S. 50 (1905)

2. 330 U.S. 1 (1947)

3. 392 U.S. 236 (1968)

4. Jencks, Christopher "Education Vouchers," *The New Republic,* 4 July 1970.

5. *Wichard vs. Filburn,* 317 U.S. III (1942), p. 131.

6. Public Act No. 791—Voucher Payment, Effective 1 July 1969.

7. *Ohio Rev. Code Ann.*—S. 3317.06 (Baldwin—1969)

8. *Pennsylvania State Ann.*—Tit. 24, SS 5601—09 (1968)

9. *Rhode Island General Laws Ann.*—S 16-51 (1969)

INTERVIEW WITH CHRISTOPHER JENCKS

Christopher Jencks, Associate Professor of Education at Harvard Univeristy is one of the leading advocates of the voucher system in America. As Co-Director of the Center for the Study of Public Policy in Cambridge, Jencks was one of the principal authors of a comprehensive sutdy of the educational, economic, sociological, and legal arguments for and against education vouchers. This study, along with several earlier articles—"Is the Public School Obsolete?" in THE PUBLIC INTEREST of Winter 1966 and "Education Vouchers" in THE NEW REPUBLIC of July 4, 1970—has done much to enlighten the liberal community on the merits of competition as opposed to monopoly.

To learn more about Jencks and his views, REASON dispatched former editor Lanny Friedlander and contributing editor Mark Frazier to interview him in his Cambridge office.

Reason: In your work, you have criticized the American school system. Yet your study did not consider the possibility of abolishing public schools and leaving education entirely to private schools. Why was this? Do you believe there is a necessity for public schools?

Jencks: I'm not sure that we made a decision that there is or is not a necessity for it. What we really assumed was that a parent's choice to send his child to a public school should be respected in the same way that the choice to send a child to a private school would be respected.

Reason: What is it about a public school that would lead some parents to choose it over a private school?

Jencks: Well, I suppose initially the thing would be that they would choose a public school because it's there and because they're familiar with it. You start out with a system that is all public or ninety percent public—the buildings are there, the people are there, and so forth. In many communities, the notion of having a school which is in some sense the common property of everyone in that community is something which people are very committedto. And in so far as that's true, it seems to me that it would be a reasonable thing to continue.

Reason: Would education continue to be tax-supported or would it be voucher supported?

Jencks: The tax support would come in the form of vouchers, of course, under the system. But the schools would continue to be controlled by a locally elected or appointed board of education. They would not be controlled by some private board which is self-perpetuating. Their financial situation, however, would be the same as that of a privately controlled school.

Reason: We would like to explore another topic—educational needs. In your report, on page 74, you say, ". . . low-IQ children and children with behavior problems would probably be left to the less desirable schools (in an unregulated voucher system). These schools would have ever-increasing difficulties in attracting staff and offering an adequate program. The more segregated the system became in terms of ability, the less likely a disadvantaged child would be to learn anything at all." Why wouldn't there be special schools set up, as a function of supply and demand, which were geared to children with behavior problems or low IQ, making extensive use of mechanical aids and specially trained teachers?

Jencks: I think there would be, if you were paying substantially more money. But if you have a voucher system which gives everyone the same amount of money then you're confronting a school which goes into the market with the option of either trying to get a relatively easy-to-educate child, for which they would be paid a thousand dollars, or a more-difficult-to-educate child for which they'll be paid exactly the same amount of money. In that kind of situation, naturally people will opt to do the easy job instead of the hard job, because there's no price incentive to go with it.

Reason: Are you familiar with George Dennison's First Street School?

Jencks: Yes.

Reason: Well, for about $850 per child, this school seemed almost incredibly successful in educating lower class children with behavior problems that had taken them out of the city public schools.

Jencks: I think that you could get some schools like that. But George Dennison is an unusual person, and the basic problem is that we can have one, two, fifty, or a hundred schools like that, which reflect the fact that there are people with special gifts, but there would be vastly more students who needed a school like that than there are, at least at the present time, teachers available and willing to do that kind of thing.

Reason: Some people involved in rethinking modern education seem to have a more mechanistic view of education than, say, someone like Holt, who doesn't look at how much money is involved but at how good the relationships are. Do you agree with that?

Jencks: Well, I think that the voucher system *is* a mechanical scheme, a legal scheme, an economic scheme, and it doesn't really address the question: "What is a good school?" It simply says that you are more likely to get a good school, whatever that might be, if financial arrangements and the ways in which people choose schools and get into schools involve more voluntarism than is the case now. The way I see it, at least, is that it's a precondition for doing the kinds of things that Holt, for instance, is interested in; but it doesn't assure that they'll be done or state how they'll be done. Somehow

you've got to devise a system which doesn't say "You gotta do it like Summerhill" or "You gotta do it like First Street School" or "You gotta do it like John Holt says" or "You gotta do it like anyone else says." It has to give people room to maneuver and room for the feeling that they can control it and change it, so that when they don't like A they can go to B.

Reason: There is a whole series of questions that are somewhat interrelated. It concerns the desirability of letting parents supplement their children's vouchers. The report came out pretty strongly against letting them do so. First of all, can't those who couldn't supplement their vouchers get a good education nonetheless?

Jencks: There are two views of supplementation that are really quite separate. The first questions deal with whether you can do something for less money than somebody else is doing it for; it's kind of a question of whether it's fair to have more money spent on child X than on child Y. I do not have any question in my mind that cost is very indirectly related to the quality of education people get. I think it has some relationship, not because absolute levels of expenditure are all that important but because schools which get the least money can have a harder time getting all the things that money buys, and that in turn makes it harder for them to get good teachers and so forth. But that doesn't seem to be clear-cut; there are plenty of exceptions. You can point to lots of good schools which run on low budgets.

The second aspect of supplementation is the one I am much more concerned about. If you have a system where parents can supplement their vouchers, then that leads to economic segregation in the schools. A school sets its tuition at a given level; but, if that exceeds the level of the voucher, people can only get to that school if they're willing and able to pay the difference between the voucher and the price of attendance. And the natural process in that kind of situation is that every school will raise its price as high as it can, because it can always think of ways that it can use more money. There would be a few exceptions, but by and large, if you look at the way schools work, there are always pressures inside the school for money, more resources. . .

Reason: But at the same time, there *will* be a demand for low-cost education.

Jencks: Right, absolutely.

Reason: And there will be people who will meet that demand.

Jencks: Right, but what you will get then is a set of schools at different prices. . .

Reason: Offering different qualities of education?

Jencks: They may not be offering very different qualities, but they will be charging different amounts of money. And then we've got a situation where, if you believe as I believe, that the most important thing in the character of a school is the character of the other students you go to school with, then the question of price—how much teachers are paid, what the cost of the building is, and that sort of thing is not so important. I don't want to set up a situation in which kids from low-income families can only go to school with kids from other low-income families, and conversely, where kids from upper-income families in fact go to school only with kids from other upper-income families.

Reason: Doesn't this equate character value with the amount of money your parents have? What is the value of an economic mix?

Jencks: I think there are two values. One: there is a good deal of evidence that a low-income school has a special set of problems associated with it. . .

Reason: Low-income *public schools.*

Jencks: Yes. There isn't much evidence one way or another for low-income private schools because it's very hard to operate them. And the people who do operate them are usually very highly selective in one way or another. It's not that one cannot imagine a school which would work that had an overwhelmingly low-income student body. But there is a series of pathologies that begin to work, each of which makes more problems in other areas, until you end up with a situation that is the characteristic school that Kozol describes. If you assume that the kind of people who go into teaching now continue to go into teaching and that the types of pressures on schools are and will be pressures that now exist, then a school which is structured on a certain set of attitudes on the part of the kids (the kinds of things they do and don't bring from home) is more likely than not to start on this downward spiral. It doesn't have to, but it is very highly probable that it will, unless there is some extraordinary person or situation to prevent that. And, conversely, it seems to be very much easier to keep a school running in at least a sort of semi-human way if you have a relatively limited number of children who come into the school with severe problems from home. And that is equally true if they come from poor, rich, or middle-class families that have serious problems at home. It's just that there's a problem with concentrating too many problems at the same place, and it get worse and worse and worse.

Reason: The next question is a moral question. If you're allowing segregation on the basis of religion, because there is going to be support for parochial schools, how can you say that you will not allow segregation by behavior or intelligence or race?

Jencks: You have to be clear about what we're allowing in terms of religion. We're not allowing a school to exclude kids who are not Catholic. That's one of the reasons why Catholics are not entirely enamored of this system. The emphasis is on the right of every parent to choose any school, regardless of any characteristics of the child, and on restricting the rights of the school to exclude. It's clear that if a school sets up some types of progress, it's not going to get anything like a random sample of the population. If I set up a school that is conducted only in French, for instance, I'm not going to get a typical cross-section of the public represented in my students. But anyone who wanted to send his child there *could* do that.

Reason: Even if you *outlaw* segregation on any basis, won't subtle and uncontrollable manifestations of prejudice segregate certain schools just as effectively? For instance, white administrators could keep blacks out of their school, couldn't they?

Jencks: There are a couple of things to bear in mind. One is that in terms of all-white academies, there is a requirement under Title VI of the Civil Rights Act that not only the student body be non-discriminatory, but also that the faculty be integrated. Assuming that a bureaucracy is not a very efficient organization—that they can count heads and do simple things but that they can't do very subtle or complicated things—government officials can look at a school and see if a faculty is all-white. And, if the faculty is all-white, that is reasonable grounds under the Civil Rights Act for withholding Federal aid—and also, under Supreme Court decisions, would probably

be reasonable grounds for declaring any state or local aid to such a school as unconstitutional. Now that doesn't prevent someone from saying, "Well, I'll hire a couple of black people" and having their token blacks like everyone does. That's true in the south now. But there are limitations and pressures put on the extreme manifestations of a lot of these things, which would make it a lot harder to run a racist institution than it would be if you didn't have these limitations. But they don't make it impossible. The people who are most committed, and willing to devote the most energy to running a segregated institution, are very likely to find ways to keep their kids segregated, *just as they do now.*
The point about the pressures is that in effect you say to people, "If this is your number one priority in life, not to have any black people around, there are ways you can do it. And if you'd just as soon not have any black people around, but you're not willing to put all your energy to it, then you're going to have to live with the fact that there are strong pressures in the society towards integration."

Reason: Don't these pressures, inescapable legal pressures, tend to create resentment? Hasn't experience shown that antagonisms then persist through great lengths of time?

Jencks: I think there's no question that under some circumstances it generates antagonism, and there's no question that under other circumstances it seems to have the opposite effect. You can cite lots of examples either way. It is *not* at all clear that simply tossing different people in the same school automatically makes them get along either better or worse than they did when they were separated. One of my assumptions is that when you put kids in the same school, where they have to live with each other, it becomes the interest of the school itself to try to create an atmosphere in which students get along with each other. It is in fact *easier* for the school, in the long run, to operate successfully if it doesn't have a lot of racial tension. Now that doesn't *guarantee* that they'll do that, particularly if you have a very strong tradition in that community "to keep the blacks in their place." But in the long run, again, you have a situation where school bureaucrats want no trouble. So one thing they don't want is racial acts in the school. And over any period of time they probably will try to begin to promote an atmosphere in which the black and white kids can get along with each other, rather than one in which the black kids get put in the back of the bus, in any manner of speaking There's going to be a lot of grief along the way, just as there has been in the integrating of public schools in the south—a lot of pain and push and pull, but the basic assumption is that if you put people in relative proximity to each other it increases the pressure for them to make peace with each other in some genuine way, in a way that the existing segregated system doesn't do.

Reason: What about Roy Innis' idea of black separatism, where black people run their own schools and decide what they want their children to learn? Would this foster increased racial understanding—maybe not in the short term but in the long term, when the races are not in the position of one having grievances and the other being responsible for these grievances?

Jencks: In the long run, I guess, anything which gives people a sense of confidence in themselves and an ability to control the world around them, to be responsible for their own lives, makes it easier for them to get along with other people and for other people to get along with them. If the kinds of schools Innis wants to promote have that kind of effect on the students attending them, it seems to me that in the long run it will be easier for us to develop some kind of society where blacks and whites can live together on a reasonably equal basis. The short run effect is obviously very problematic; a lot of those things which get done in the short run may increase antagonism. But in the long run I think the effect is very likely to be good. The analogy I intend to use is the parochial school system. You take a group of Irish Catholics coming into the United States—bottom of the heap, dumped on—they create a school system, their *own* school system.
Kids who go through it, it turns out, are sort of "more American" than the "Americans" in a lot of ways. And not only that, they are relatively speaking, more successful within the existing system than were comparable Catholics who went through the public schools which continued to be run by non Catholics. If you pursue the analogy, it is at least plausible that you could get the same kinds of results with black education. It's a long-term thing. The parochial school system did not create love and amity at the time it was started; in fact there was tremendous tension around it for several generations.

Reason: One other item about discrimination. What are the effects of mixing bright kids with slow kids? Likewise, well-behaved and not well-behaved kids? Would it encourage the development of inferiority complexes and resentment, or would there be more "exemplary" behavior and learning development than otherwise?

Jencks: There is a vast research literature on this subject. I guess perhaps a simple summary of it is that it does both, at once, which makes it very hard in a particular situation to say which one will be the most important effect and which one won't. But the common sense interpretation is that on the one hand people will emulate the people who do something better than they do, and learn from them, but that on the other hand they will have problems when they have to compete with those people. The question is to what extent any particular situation is *competitive* as against *cooperative,* if you will, and secondarily, to what extent the competition is between people who *can* compete.
The best analogy I can think of is athletics. If you play tennis a little bit out of your league, you get better; if you play too much out of your league, you just get smashed.

Reason: How can one determine the intelligence or behavior characteristics of a five year old child? How can a school decide which children are "desirable" and which are not?

Jencks: Well, of course the first problem is that it is not easy to do this accurately. But the second half of the answer is that a school that wants to end up with a predominantly high-ability student body, let's say, although it can't be sure about any particular child, can still have a very substantial effect on the averages it ends up with by using, for instance, Metropolitan Readiness Tests on five year olds. They're wrong in a lot of individual instances, but still you'll wind up with higher averages in the sixth grade if you pick all the kids who did in the top quarter of the MRT, higher than if you just picked kids at random. You'll end up with substantially higher *averages.* It's just like the college admissions business—you give a test, you look at the grades, you read the recommendations. You're still wrong in lots and lots of individual cases. But on the average you can get a better student body if you use all that information than if you ignore it. The same thing is true of five year-olds: you can't be very effective with any individual child, and that's what's so unfair about it but from the school's point of view it isn't very important whether they're right about individual children. They're struggling to build an overall atmosphere and an overall average that will be a plus.

Reason: Does your report in any way reccomend that compulsory attendance laws be repealed?

Jencks: We don't deal with that at all in the report; it's always state legislation. My own feeling is that the compulsory attendance laws are probably much more rigid than they should be and that they're lousy particularly in terms of teen-agers. There ought to be a lot more flexibility and more options available.

Reason: Government programs tend to be very much concerned with a "problem" without bothering to integrate that with other problems. Is it perhaps part of the political structure for bureaucrats to look at things as if they were units to be shuffled around like with kids, to be shuffled around. . .

Jencks: I think it's natural for bureaucracies to do that. It's not so much natural for a political process to do that; in fact, I think, where you look at the political process, it often tends to be too much the opposite. People's reaction to an education proposal will not be in terms of what it's going to do for schools but in terms of a whole set of ideas that they've got about conservative or liberal politics, or their anxiety about drugs, or whether they think their kids are behaving right. In politics, it seems to me, ideas and feelings interpenetrate a lot. The technical issues don't so much because people just don't know that much. But when you administer something you've got to have a bureaucracy to make sure that the mail gets out on time, the payrolls met, and people have continuity and order in their lives and all the things that it turns out people secretly want, you can get the kind of compartmentalization that you're talking about.

Reason: There is a lot in the report about giving control to the parents of the children not a distant board, but what about the children? They're the ones who should be getting this money. . .Maybe that's super idealistic, but what about the vision of kids *running their own lives,* still being kids and crying and leaning on the parents and things like that, but still running their lives from a very young age. Why does the government dictate up to whatever age this program specifies that the parents are going to be the ones who make the choices?

Jencks: We're talking about elementary school kids. One of the reasons we're talking primarily about them is precisely that there are ambiguities, when you get to the high school age, of who should be making the choices. I think that legally there's no likelihood that we could get through a program which gave legal control of these choices to kids. . . But at the same time, if you want to maximize the choices that students have, it is clearly more likely you can do that if the choice is in the hands of the parents than in any other circumstance. Kids are much more in a position to get their parents to do what they want than they are to get the school board or some bureaucracy down town to do what they want. Kids are good at browbeating their parents, by and large; if you want to go to some school, you raise a lot of hell, and they'll probably let you go there. So if you're thinking about effective choice for kids, the first thing you need to do is put the people who make that decision close enough to the kids so that there can be some kind of pressure exercised on them. The more *removed,* the more formalized and bureaucratized it gets, the less effect that pressure can ever be in influencing a process.

Reason: Let's talk about teenagers—you're going to give eight hundred or a thousand dollars a year for their schooling but that only continues their dependency, which is what these free schools are trying to get away from. You end up with the problem that it's someone else's money they're getting while you're trying to teach them at the same time to be responsible for their lives. Your report probably doesn't deal with this, but what is your personal opinion?

Jencks: There are two pieces in it. The first is that I think its very important that people start to work young. . .

Reason: But what about child labor laws?

Jencks: Yes, I think that the child labor laws are for the birds. Well, that's not true. I think the child labor laws as they were originally constructed made a lot of sense. . .

Reason: You know what they're for; they're for adults who are afraid that ten year old kids are going to take their jobs away. That's what they're for.

Jencks: It seems to me not unreasonable to say that children can't work ten hours a day—that there are situations which get to be very exploitative. On the other hand, it seems important that people get very early to feeling that they can earn money, that they can carry their weight in the world, that they can do something: that they're grown-ups in some sense. And *not* that they should sit around and say, "Gee, if I keep sucking, it'll keep dripping in." You see people around here (Harvard) who are twenty-five years old and still living off handouts from their parents, and that gets very bad psychologically, to feel dependent that way. However, it is all very true that if you're fourteen years old and you're trying to get an education and at the same time you work, you can't normally find a job that'll pay you enough money to pay the cost of the education.

Reason: What is "an education"? If you're learning the trade you're interested in and studying at home, where. . .

Jencks: That's no problem. But it's clear that it's very hard to do that.

Reason: It is hard because people still hold the traditional view of education: that you have to go to another place and spend eight hours a day watching someone write on a blackboard.

Jencks: I wouldn't assume that. Suppose you take the classic kind of situation you used to have before the child labor laws. Let's say someone wants to be a lawyer. It used to be the case when you wanted to be a lawyer that you went out and got yourself apprenticed to a lawyer. . .

Reason: Does that make sense?

Jencks: Yes, that seems not unreasonable, but it may be more effective in *some* cases to spend some time in a law school, because one of the things ineffective about it is that if you've got to work for somebody as an appretice he's quick to give you the work that he doesn't want to do and that doesn't teach law. So there are problems about protecting the rights of someone who has come in to learn the law by working for somebody, to make sure that he gets a chance to learn the things that are interesting, instead of just getting to empty the water cooler.

Reason: A law student, for instance, usually has a great deal of interest in teaching someone else. So the question is how to get people together in these new relationships where people just learning something, who are very eager, teach others from their (meager) store of knowledge.

Jencks: I think that makes a lot of sense. But you still come back to the problem that, if you conceive of jobs in

the traditional way, something that you get paid for if you have a socially useful product that someone else is willing to buy, it's very hard for most people who are young and inexperienced to have enough product that is worth money to the society to sustain themselves when they're young and also get an education. In some cases they may be able to borrow against their future—you know, where they say, "I'm going to study something now, then work to pay back later." And it's worthwhile now for society to support him so that at some later point. . .

Reason: So *that* is the purpose of the public assistance. . .

Jencks: Yes. And there are a lot of ways you can do that. You can do it through loan funds, which make a lot of sense. You borrow a lot of money, and then you pay it back. That way you can support yourself at least partially from fourteen to eighteen, doing something you want to do and learning some sort of skill—and at a later point in life you support someone else.

Reason: What would you think of IBM, for example' saying to a teenager, "You seem to be interested in computer technology. We'll be willing to give you room and board and pay for your education if you'll work for us for five years after you get out." What type of potential does this have? And how can you construct a system that will permit this?

Jencks: The problem with that is that people of forty, let alone fourteen, really don't know what they're going to be like five years from now.

Reason: What about some other plan, though. Not many kids today would take anything with a five year contract. Something with less demands on young people...

Jencks: But then it doesn't become attractive to IBM, you see, and that's why we get back to the public subsidy of education or some mechanism which instead of putting the burden on a particular corporation or group to subsidize something which is designed to serve their particular interest (the only plausible thing they'll subsidize) is going to serve the general interest of the society in some way.

Reason: Well, the "general interest" has to mean someone's interest, that of the individual people who have an interest in that kid. In reference to individual contracts, you could also have escape clauses: when I become nineteen, I could say to IBM, "I'm not interested in computers anymore, but I'll pay you back with interest."

Jencks: But when you do that, you're at a point not very different from one where you say "We're going to set up a state loan fund like the national defense education act from which you can borrow the money to go to school, and then you pay it back." In effect, now you're borrowing it from IBM rather than borrowing it from the government.

Reason: The difference between the two is that in *one case* you know that there's someone who really expects something of you; in other words, he's an interested party. People always get the idea that the interested party is the one you've got to watch out for, but it's the disinterested ones because they're always likely to standardize everything and not really be concerned with you. Which brings us to the subject of the Free Schools—schools with absolutely minimal amounts of bureaucracy. What future do you see for this sort of non-institutional institution?

Jencks: I think they're likely to spread. The Free School movement reflects a change in mood. It's hard to stop institutions; they always grow when they find a mechanism. It's like cancer—when you find a dynamic whereby an institution can feed on itself it starts to grow like mad. It gets to tap the public till. Or it becomes profitable. Or it gets to serve the interest of some group of people in some way, then multiplies itself like mad. The Free School movement hasn't figured out a way to do that. It's still operating at the level where people are: they want free schools, they create them to serve a purpose for as long as it serves their needs, and then they let them go, so they don't have a long-term existence.

Reason: Perhaps that's what the movement is all about—things last as long as they're needed.

Jencks: That's right, but that almost means, by definition, that it's a movement and not an institution. It's like rock songs; they'll be popular for a while and then poeple get bored with them. And that doesn't mean that the phenomenon of popular music isn't a big phenomenon—just that no particular form of it has much durability. It's very different from a school system in that sense.

Reason: So where do you go from here? Is your work finished in a few months?

Jencks: We're trying to get a demonstration project set up, so I spend all day contacting poeple.

Reason: And you'll be running that?

Jencks: We won't be running the demonstration; some local community will be running it, if we can get them to do it. We don't want to run things even if we could.

Dreamers walk alone...
And learn to live with bruises.
Once they left open their doors,
But too many came
Only tracking mud and laughing.
Soon those doors were locked,
Opened cautiously
To but one or two.

They were greeted with a smile
And wonderous talk
And arms gesturing wildly
And a hope that you'll stay awhile...
And share.

H. J. Hohenstein

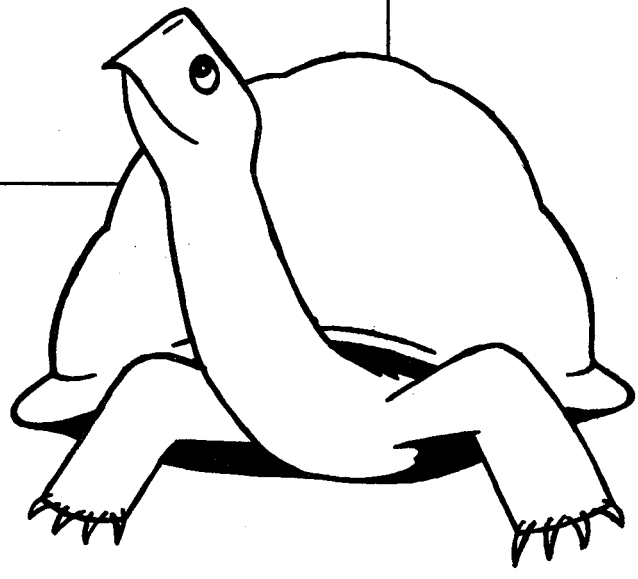
Puffiness is nestled in your eyelids,
Hollows are scooped beneath your eyes,
Listlessness grasps your body
While fever rages on your forehead,
And I can only briefly hold
A cold compress against this storm.

If by some magic I could take
This plague from you,
I would swallow it,
Cacoon myself and beat it in mortal combat.
While some enjoy a lifetime
Of being unwell,
Sickness does not wear well on you.

H. J. Hohenstein

teaching children thinking

SEYMOUR PAPERT



One year ago in April, MIT was host to a day-long seminar on the subject of "Teaching Children Thinking." The focus of the day's activities was the work of two members of MIT's Artificial Intelligence Laboratory, Professors Marvin Minsky and Seymour Papert. During the 1969-1970 school year, Minsky and Papert were given a seventh grade math class in Lexington, Massachusetts, to teach. Instead of daily lectures in math, they set up computer programming projects, utilizing on-line teletype terminals interfaced with a PDP-1 computer. Using a special programming language called LOGO and setting their own pace, the children learned to make theories, find counterexamples, generalize and extend theories, face problems, and make decisions—in other words, to think, to exercise their minds.
Professor Papert is documenting these experiences with teaching children to think in the form of a book, as yet untitled, to be published later this year. REASON is pleased to present excerpts from this book, in advance of publication.

INTRODUCTION

The most pointed complaint about the use of technology in education is that it often reduces to inventing clever new gadgets to teach the same old stuff in a thinly disguised version of the same old way. When the technology uses computers the complaint is aggravated by apparently high cost and fears of "dehumanization." People who bring these charges are usually thinking of something like the teaching machine dialogue below as a model of how computers would be used in education:

Q.: What is 2 plus 2?
A.: 7
Q.: No, Johnny, it is 4. Please try again.

The dialogue shows successive stages in an interaction between an invisible computer (Q) and an invisible child (A) via a device know as a Display Console. Its essential visible parts are a TV tube and a keyboard. It is connected to a computer which can cause words, pictures, or what you will to appear on the tube.

The public image of the computer's role in education is dominated by the Teaching Machine, but this is a false picture of present reality and even more so of future potential. In fact, the Teaching Machine is merely one of many ways in which computers and the science of computation are asserting their claims to an important role in the theory and practice of instruction.

The purpose of this monograph is to provide insight into the kinds of ideas and the visions of education that inspire these claims. A large part of the monograph will describe the use being being made of computers in an elementary school near Boston—the Bridge School in Lexington. This description can be taken on several levels. Some people will read it as a simple picture of children doing some very exciting things and, if they are teachers, might even use some of these models for projects in their own schools. The descriptions are couched so as to make this as easy as possible for anyone who wants good ideas for projects and has no patience for more theoretical and longer term consideration. But there is more to it.

The word "visions" in the previous paragraph was deliberately chosen. Beyond the particular projects described below in precise technical detail is an image, blurred in some places, quite unspecified in others of what the lives of children could be like and what the theory and practice of education could be like. The content of this vision will become fuller and clearer in the course of the following pages. But before broaching the specific content it is useful to say something about the level of aspiration.

Behind much of the thinking described below is an attempt at formulating an experiment to probe the limits of the educational capacities of children. It is crucial to our purpose to realize that there is almost no theoretical or experimental knowledge with a direct bearing on the simplest questions one might ask about the inherent learning

capacity of children or about the relative degrees of difficulty of different subject matters. Take mathematics as an example, though any other would do as well. Ask the psychologists, the teachers, or whoever you will whether they think it would be possible to construct an educational system so that 99 percent of the present first grade children would become proficient in mathematics at the level necessary, say, to major in it at a good college or even at the level necessary to do significant research in topology. Of course, it is irrelevant to discuss the *desirability* of creating a few million topoligists. Is it possible?

Now I maintain that no one is in a position to venture any responsible guess! One can certainly point to the fact that *very* few actually achieve *true* competence even at the level of elementary school math. But it would be the crassest empiricism to deduce from this that mathematics if intrinsically difficult or that most children are not "mathematically minded." One might as well deduce that French is intrinsically difficult and that most children are not "Frenchly minded" from the poor competence achieved by most children in school French. Yet we know that these same children would all speak French fluently had they grown up in France. Their lack of aptitude is therefore not really for French as such, but for learning French under the conditions that obtain in our schools. So let's ask the question about mathematics again in a different form. *Is there something that would be to learning mathematics like growing up in France is to learning French?* The question defines one corner of our vision. This is the idea that one might be able to construct a "Mathland" in which almost everyone would grow up with a true competence in mathematics just as almost everyone seems to acquire true competence in his native language.

But, since we are merely asking questions, let us continue the fantasy to ask: why stop at math? Could there be a "land" in which everyone would have an easy competence in "analogies," "generalization," and all the other mental paraphernalia of the "intelligence testers"? Could there be an "IQ-land," "Think-land" in which everyone (supposed in our fantasy to be biologically identical copies of the present population of first graders in the U.S.) would grow up with Stanford-Binet scores above 180?

The vision of education presented in the following pages reflects an increasingly widespread belief that these questions are not pure vanity. It is true that many romantic dreamers have entertained similar hopes. But ancient dreams about flight were no reason to shun experiments on aviation. The point, of course, was that the Wrights and other pioneers recognized the emergence at last of a technology capable of realizing the dreams. There is no proof that we are in the same position in relation to a possible educational technology. Nor will there be unless enough people with talent and access to material resources judge that the thesis is *plausible* enough to make it worth pursuing with the kind of dedication given by the poineers of aviation (or any other new field) long before this dedication produced *proof* that they were right. . .

GLIMPSES OF MATHLAND

To ask whether there could be an IQ-land is a far cry from finding one, and it is scarcely original. Many educational reformers have dreamt the dream and their fialure must be taken by any hard-headed observer as at least indirect evidence against the reality of the vision. But I shall argue that we have the technical means to carry out what the earlier reformers only wished they could carry out. We can actually lay down a first sketch of how to construct a real Mathland. Indeed some pieces of it are already built and occupied by children. Naturally our first sketch will not be the final and decisive one; I claim only that it shows we can cross a certain barrier whose importance has been widely recognized by many clear minds devoted to education. To define the barrier and our relationship to our predecessors, let's hear for a moment the voice of John Dewey.

Digression: A Word from Dewey

For Dewey the dilemma of schools is expressed in the following passages contrasting schooling with the way he supposes children learn in less developed societies:

For the most part, they depend on the children learning customs by sharing in what the elders are doing... To savages it would seem preposterous to seek out a place where nothing but learning was going on in order that one might learn.

But as civilization advances, the gap between the capacities of the young and the concerns of the adults widens. . .Much of what the adults do is so remote in space and meaning that playful imitation is less and less adequate to reproduce its spirit... The task of teaching certain things is relegated to a special group of persons...But there are conspicuous dangers attendant upon the transition from indirect to formal education. Sharing in actual pursuit, whether directly or vicariously, is at least personal and vital. . .Formal instruction, on the contrary, easily becomes remote and dead—abstract and bookish to use the ordinary words of deprecation.

You Can Take a Child to Euclid but You Can't Make Him Think

The child at the hunt is *involved;* the child in the grammar class or the geometry class is *alienated.* That this is not quite always true is a remarkable fact pregnant with hope. Somehow for a few children the contents of the academic subjects come to life; and these children have the marvelous experience of learning ideas at school that are actually relevant to personal problems and interests.But are we to believe that the other children are born academically alienated and doomed to be so? Clearly not and, indeed, a great deal of effort has been expended in trying to present the academic material in a more living, personal way.

I think we need to cut the Gordonian knot boldly. It is often said that elementary school mathematics is badly taught; and dedicated teachers, taking this to heart, work desperately to find ways to teach it better. I suggest that the difficulty is really not that it is badly taught, but that it is fundamentally unteachable. I do not mean to deny the obvious fact that heroic measures of superlative teaching will get somewhat better results. What I mean to suggest is that this scholastic math (new or old) is not a naural route into mathematical thinking! A natural route would probably be more like the participation in Dewey's hunt. I believe (following Piaget) that all children acquire a great deal of mathematical knowledge through activities that lie outside the classroom. I believe that some children go far enough along such routes to cross a threshold of mathematical comprehension which enables them to work in the academic context (until, as often happens, they are turned off by it!)

To give substance to this series of expressions of personal belief, I shall describe another context for mathematical work. When we have it as a concrete example, we can come back to the general issues.

A Fifth Grade Child and his "Turtle" on the Fringes of Mathland

As a first groping step to building up an image of Mathland, let's pursue the analogy with learning French in France. This idea leads by an easy step to the fantasy of a companion who would speak only mathematics and do wonderful things with us if we could converse with him. Wouldn't this make leaning to "speak" mathematics more meaningful and involved?

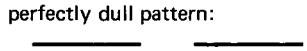
An early attempt to construct this comparison is a cannister shaped object on wheels. It's called a LOGO turtle and is part of the experience at the Bridge School.

LOGO turtles differ in many ways. Their common characteristic is that they are controlled by a computer which in turn is controlled by a child. Let's see concretely how this control takes place.

The child at the console types
FORWARD 100
and watches the turtle move (slowly and deliberately or fast and impetuously) depending on which turtle the child has chosen and partly on what instructions have been given previously).

The command
FORWARD 200
causes the turtle to move twice as far in the same direction. Next the child types
LEFT 90
and the turtle moves around its center through 90 degrees without any other displacement.

The turtle's movements left no trace. But when the child types
PENDOWN
there is a thud as a pen falls down a a tube at the turtle's center and thereafter the turtle will leave a line wherever it goes, until this command is countermanded by
PENUP.
Thus the series of commands:
PENDOWN
FORWARD 200
PENUP
FORWARD 100
PENDOWN
FORWARD 200
will cause the turtle to draw the perfectly dull pattern:



To make the turtle do anything more interesting one has to learn how to use a programming language in order to instruct the computer how to combine the elementary turtle commands to produce complex patterns. Simple flowers and stick men are examples of patterns that require mastery of some very definite and deep mathematical ideas—certainly more than usually goes into a freshman high school algebra course—and yet are within reach of average fifth grade children. Needless to say almost all children find this route into mathematical thinking more meaningful and exciting than learning to solve linear equations!

The turtle is not limited to acting like a slavish draftsman. It can be given more active and flexible kinds of behavior by using its sense-organs. Around its periphery is touch sensitive tubing so that signals are relayed back to the computer when it makes contact with another object. The turtle is not built with any "innate" behavior patterns. What happens when a signal comes depends entirely on the programs the child has constructed for it. An easy program is to make the turtle reverse its direction whenever it hits an obstacle.

Review: Bridging the Dewey Gap

My first sentence complained about educational technology being nothing but inventing ingenious new gadgets for old ideas. But, to be really objective, one must admit that an educational purpose is served. Perhpas not for the children but certainly for the inventor of the gadget who surely gained an intellectual stimulation and excitement from the experience!

So why not turn the tables and let the children do the inventing?

The emergence of computational technology makes this suggestion seem much less preposterous. The typical product of "classical" technology was a mechanical system with lots of parts that had to fit together rather precisely and stay together if anything interesting was to happen. Thus making clocks or internal combustion engines requires precision on a level that is unlikely to obtain in an elementary school and, moreover, boring in execution. Even more serious is that such devices do nothing until they work properly. The situation is sharply different when we consider "information machines" in place of "matter machines" or "energy machines." Suddenly there is the prospect of systems with great and interesting complexity, made of parts each of which functions interestingly by itself, and, above all, the coupling between the parts does not require mechanical precision or an understanding of abscure conditions for "matching." In the extreme case there is nothing but "information": the system and its parts are all programs in a large powerful computer. Even when the work with turtles brings in physical manipulations and even in putting together physical parts usch as attaching a new sense organ, it remains basically true that the interface between the parts is informational.

The important point is that developing programs can provide very young children with an experience much more like that of a research project than anything now available in the schools. This is not meant to suggest that "programming" is in itself the key to a new education. Writing a "machine language" program in "binary" to add a series of numbers is as abstract and, to most children, almost as boring as learning long division. Good programming languages lead to better results and are essential to many of the projects we shall discuss. But programming is a mere vehicle (the tool, the raw material) for what we have in mind. The educational experience is a project involving building a system of programs of a particular kind—we shall later on develop examples of conversational programs, programs to play strategic games, teaching programs, etc., etc.

Dewey complains of a situation in which the gap between the occupations of adults and the means accessible to children is so large that playful imitation cannot capture anything of the spirit. I think the new technology is closing the gap—provided of course that we help by giving children access to it. . .

TEACHING THINKING AND LEARNING

This chapter is about trying to teach children how to think and how to learn. Some of the ideas in it have no *logical* connection with computation. The idea of heuristics is used in very much the same way as in Polya's books. But I maintain that programming provides by far the best examples on which students—particularly elementary school children—can work to develop a sense of heuristic problem solving. So, though there is no logical connection in this case there is a strong heuristic one.

Other ideas are more obviously realted to computation. In particular we shall discuss how programs can be used as models of one's own thinking. This will bring us into direct contact with an important set of ideas from the branch of computation known as Artificial Intelligence.

The first sections of the chapter deal with some very general questions about education.

The Don't-Think-About-Thinking Paradox

It is usually considered good practice to give people instruction in their occupational activities. Now, the occupational activities of children are learning, thinking, playing, and the like. Yet, we tell them nothing about those things. Instead, we tell them about numbers, grammar, and the French revolution somehow hoping that from this disorder the really important things will emerge all by themselves. And they sometimes do. But the alienation-dropout-drug complex emerges too.

In this respect it is not a relevant innovation to teach children also about sets linguistic productions, and Eskimos. The paradox remains: *why don't we teach them to think, to learn, to play?* The excuses people give are as paradoxical as the fact itself. Basically there are two. Some people say: we know very little about cognitive psychology; we surely do not want to teach half-baked theories in our schools! And some people say: making the children verbally self-conscious about learning will surely impede their learning. Asked for evidence, they usually tell stories like the one about a millipede who was asked which foot he moved first when he walked. Apparently the attempt to verbalize the previously unconscious action prevented the poor beast from ever walking again.

The paradox is not in the flimsiness of the evidence for these excuses. There is nothing remarkable in that: all established doctrine about education has similarly folksy foundations. The deep paradox resides in the curious assumption that our choice is this: *either* teach the children half-baked cognitive theory *or* leave them in their original state of cognitive innocence. Nonesense. The child does not wait with a virginally empty mind until we are ready to stuff it with a statistically validated curriculum. He is constantly engaged in inventing theories about everything, including himself, schools, and teachers. So the real choice is: *either* give the child the best ideas we can muster about cognitive processes *or* leave him at the mercy of the theories he invents or picks up in the gutter. The question is: who can do better, can we or the child? Let's begin by looking more closely at how the child does.

The Pop-Ed Culture

One reads in Piaget's books about children re-inventing a kind of Democritean atomic theory to reconcile the disappearance of the dissolving sugar with their belief in the conservation of matter. They believe that vision is made possible by streams of particles sent out like machine gun bullets from the eyes and even, at a younger age, that the trees make the wind by flapping their branches. It is criminal to react (as some do) to Piaget's finding by proposing to teach the children "the truth." For they surely gain more in their intellectual growth by the act of inventing a theory than they can possibly lost by believing for a while, whatever theory they invent. Since they are not in the business of making the weather, there is no reason for concern about their meteorological unorthodoxy. But they *are* in the business of making minds—notably their own—and we should consequently pay particular attention to their opinions about how minds work and grow.

There exists among children, and in the culture at large a set of popular ideas about education and the mind. These seem to be sufficiently widespread, uniform, and dangerous to deserve a name, and I propose *"the pop-ed culture."* The following examples of pop-ed are taken from real children. My samples are too small for me to guess at their prevalence. But I am sure similar trands exist widely and that identifying and finding methods to neutralize the effects of pop-ed culture will become one of the central themes of research on education.

Examples of Pop-Ed Thinking

(a) Blank-Mind Theories. Asked how one sets about thinking, a child said, "Make your mind a blank and wait for an idea to come." This is realted to the common prescription for memorizing: "Keep your mind a blank and say it over and over." Many adults admit to thinking this way. In my sample the ones who do tend also to complain of an inability to remember poetry!

(b) Getting-It Theories. Many children who have trouble understanding mathematics also have a hopelessly deficient model of what mathematical understanding is like. Particularly bad are models which expect understanding to come in a flash, all at once, ready made. This binary model is expressed by the fact that the child will admit the existence of only two states of knowledge often expressed by "I get it" and "I don't get it." They lack—and even resist—a model of understanding something through a process of additions, refinements, debugging, and so on. These children's way of thinking about learning is clearly disastrously antithetical to learning any concept that cannot be acquired in one bite.

(c) Aptitude Theories. Most children seem to have and extensively use an elaborate classification of mental abilities: "He's a brain," "He's a retard," "He's dumb," "I'm not mathematical-minded." The disastrous consequence is the habit of reacting to failure by *classifying* the problem as too hard or oneself as not having the required aptitude, rather than by *diagnosing the specific deficiency* of knowledge or skill.

(d) Caterpillar Theories. The theory that explicit formulation harms performance seems to be itself a central part of pop-ed. It is akin to the Blank Mind Theories and is felt by children to be confirmed by examples of skills they can perform although they cannot (in their opinion and probably in reality) describe them.

The Computer vs. Pop-Ed

I do not believe that much good can come out of merely preaching to the children about these bad ideas. Such a widespread set of beliefs is bound to reflect deep aspects of the children's intellectual structures. In particular these are largely determined by the poverty of our culture in means of conceptualizing and discussing complex processes of any sort, and mental ones in particular. This must be remedied by exposing the children to more than verbal contact with the new ideas we wish to give them. We must find ways to provide a set of activities through which children can develop an easy fluency in the new concepts and integrate them into widespread structures of concept and intuition and attitude. I see the primary use of computation in this process as providing suitable activities. Secondarily, it will provide children with explicit models of some cognitive processes.

In a good Piagetian sense I'd rather say: you cannot give someone an idea; education consists of creating the conditions for him to invent it himself.

So Is It Bad to Think About Doing?

People usually withdraw the "half-baked theory" objection once they have been made to think about pop-ed. Views on the millipede objection to explicit verbal formulations are more obstinately held, I believe, on the basis of the fallacy that confuses the plainly true assertion "bad verbalization is harmful" with the contentious "no verbalization is good."

To emphasize the point a little let me use the millipede as a mythological example. I believe (mythologically speaking) that the beast might really have become paralyzed, but for a slightly different reason. The psychologist asked him, "Which leg do you move first?" and his mistake was to let himself be browbeaten into believing that the question is meaningful, i.e., that there does exist *some* leg that he always moves first. Naturally he can't find the answer, *because there isn't one.* The proper description (let us suppose!) of how he walks if "Move any leg, then move another leg thus far down along the body, etc."

The moral of this story is very important to our theme. For it says that if we are going to give descriptions of processes, we should be careful to have the means to find and express the good ones or else we will paralyze ourselves! And the means to express such descriptions are nothing other than those needed to write programs.

Learning and Describing

35
35

610

Asked whether 35 bucks and another 35 might get up to 600, the kid who did the sum said, "Not a chance" and removed the 0 to give 61 as the answer. When I said "What did you do the first time?" he said, "I didn't carry" and made a new revised estimate of 70.

Some people might say that the kid finally "got it right." But what does "getting it right" mean? Surely not the physical act of writing the number "70." In this case the fact that the first revision was 61 and the second 70 is almost certainly the result of a purely random process. It seemed very likely (from observing the child) that he knew a couple of things to do—like those two corrections—and beat around trying them until I was satisfied.

It's a pity he didn't (wouldn't, couldn't) look at what he had actually done and try to justify it instead of correcting it. For what he did do could be described as the procedure:

Get "units" of sums by adding units of numbers.
Get "tens" of sums by adding tens of numbers.
This works for 23 plus 23:
Units of sum : 6
Tens of sum : 4
Sum :46

So 35 plus 35 should give us 6 10 and what's wrong with that? Whose fault is it that the idiotic decimal place rotation won't allow us to write 6 10 without confusing it with 610?

Perhaps my general thesis can be stated crudely as follows: if you can't think things like the previous paragraph, you shouldn't be doing that kind of arithmetic; if you can think such things effortlessly, you will find the arithmetic equally effortless. The educational problem (for arithmetic) is found in helping children attain that kind of sophistication. The problem is not to get them to understand numbers as such (if there are such things as numbers as such). It is rather to develop this ability to think about people doing mathematics and especially about themselves. The components of this sophistication are in turn things like the following:

• The idea of a procedure and, especially, the idea of *following the procedure literally.*

This distinction is crucial. Most children will say that they do use the little procedure for adding digit by digit. By *using* a procedure they mean using it with the appropriate additions of good sense. Consequently when they get into trouble by using it literally, they are unable to account for their difficulty by blaming the bugs in the procedure.

• The idea of representation and, especially, feeling free (and being able) to make up a representation when one with some special property is wanted.

In my little wishful thinking about what a child might have said to justify his 610 I casually introduced the notation 6 10 for 6 tens and 10 units using the space between the 6 and the 10 to preserve some essential features of place notation while freeing myself from the annoyance of a finite number of digits.

• The idea of making a theory to explain one's behavior.

The question: "Why did you do that?" taken by children as demanding an *excuse* rather than a *causal explanation.*

• A certain attitude of objectivity in looking at oneself and mathematics and at oneself doing mathematics. This includes freedom from the puritanical dichotomy into the "right and good" and the "wrong and bad." It includes a willingness to find oneself interesting enough to think about.

• The notion of a program that fails to do what was intended nevertheless does *something.* One can only study its behavior and understand *exactly* why it does what it does. The term "bug" (as opposed to the morally charged "error") and especially the use of an active verb "to debug" reflect the elements of objectivity in this. . .

THE COMPUTER AS ASSISTANT

The theme of this chapter has a slightly paradoxical overtone illustrated by the following science fiction fantasy. A robot from outer space on a visit to Earth encounters the phenomenon of schools for the first time. On its own planet biological life vanished long ago, leaving its race of robots with enough intelligence to maintain and advance their level of technological and scientific knowledge. In particular the robots can reporduce themselves in the fullest sense of making new ones complete with all established knowledge and all known skills programmed into them at the time of manufacture. So there is no need for institutions like schools where individuals carry on activity that looks like work but is done to learn rather than for the product of the work. The robot, which we thereby see to be intelligent but not infallibly so, mistakenly supposes that schools are a kind of sweat-shop in which child labor is exploited to carry out computations. As a parting gift, it presents every human child with a miniature computer capable of doing all this work for it. The gift actually was motivated by kindness. Nevertheless some historians maintain that the robot's real intention was to sabotage the educational system so as to inhibit the development of human science to a competitive level.

The question we have to face is whether something like the robot's gift would be sufficiently beneficial to children to warrant our giving it to them without waiting for his visit; or whether it would be so harmful that we must at all cost prevent its development.

The argument for the second conjecture is easy to state. Children work at school to acquire skills. Giving them mechanical aids would be like saving a track athlete in training from the drudgery of his early morning jog by giving him a car. But such analogies cannot be pressed too far. it is sometimes advantageous to give athletes mechanical aids. The use of lifts and tows for training skiers is an example. One might object to the proliferation of these monsters on esthetic grounds or one may find walking up mountains a more rewarding experience than becoming a specialized downhill ski racer. None of this contracidts the utility of ski lifts as an educational aid for teaching skiing.

The next pages will provide some examples of how computers can be used to perform routine tasks for children in the spirit of freeing them thereby for further advancement in more interesting activity. No attempt will be made to provide a complete list. The examples chosen are meant to indicate the possible range and raise the key problems for discussion.

An Editorial Assistant

The kind of assistance the computer can give to a child is certainly not confined to performing arithmetic for him. In our first example the computer will be used in a secretarial and editorial capacity. To provide the proper mental context for this idea, try to imagine a child who has just completed an essay. On reading it through he notices a badly structured sentence somewhere in the middle. Will he re-write the sentence? Unfortunately this is likely to mean re-writing the whole essay. So, he lets it stand! The harm done is worse, much worse, than the presence of a bad sentence in a child's essay. The real harm is the *inhibition of the habit of experimental modifications* of the text in the spirit of trying several versions to see which pleases most.

Contrast this situation with another, fantastical one in which the child has a super secretary who will instantly retype the essay with any changes he wishes. It is admittedly difficult to know what the consequences will be. Surely the child would be more experimental. Surely a better essay would be produced. I conjecture firmly that the child will acquire a deeper and more sensitive feeling for language and for the organization of thinking and exposition. I conjecture a little more tentatively that he would eventually become less "lazy." This last claim will seem perverse to those who think that the supersecretary would "spoil" the child by making him "lazier" than before. Both outcomes are possible in principle. I base my claim on the assumption that the child will eventually acquire the taste for literary experiment to a sufficient degree to motivate rewriting the essay ten times by hand if the supersecretary happens to be unavailable. But that is a matter for experiments. The prior question is whether we can give the child a supersecretary.

Well, presumably not a human one, but we can make a machine perform a large part of this function. Indeed, such machines exist and are used to perform just this kind of task for people whose time is recognized as being valuable enough to justify labor saving devices. But instead of describing any particular existing example, I shall describe a hypothetical one tailor made to fit the special needs of children.

So now imagine that the child has written his essay by typing at a console. He decides to replace the word "written" by "composed." So he types

D: written I: composed (D for delete, I for insert)

and instantly the change is made. He doesn't like it. So he types

R (for Restore)

and the text goes back to its previous form. The example is trite, but illustrates the way the machine works.

The essay exists in the machine's memory. At any time the child can see any part of it by typing appropriate commands. He always sees it in a tidy form with margins and spacing neatly fitted to whatever pattern he has requested. If he wants a copy on paper it can be produced instantly—though possibly he will never require it since teachers and fellow students can read the essay at their consoles.

It would not be difficult to program the computer to notice unlikely spelling and even some unlikely syntax. Thus if the child types "dificult" the machine would observe that this is not an English word but is very close to one. So it might indicate this by displaying the word in a brighter form on the console. The child would have the option of asking it to be changed or (as would be appropriate here, since I meant to write "dificult"!) leave it as it stands.

I am sure many computer experts will exclaim, but that's much too difficult!" It is indeed too difficult to achieve right now if we want it to be infallible. But the task is much easier if we think that it would do a lot of good by very often picking on a child's mistakes and only seldom picking on a non-mistake.

An important function to automate is that now completed by using a dictionary. It really is boring and/or *distracting* to leave off writing to look up a word in a dictionary—particularly if the dictionary is large and cumbersome. For the child composing his essay at his console, the automated dictionary reference is very much easier. At his command a summarized dictionary entry appears on the screen. If he wants more information on any part of it, he says so and that part is elaborated.

And as an extra bonus the machine can print out for him at the end of the day or week a list of all the spelling mistakes he corrected, the dictionary entries he referenced, etc. If he or his teacher happens to like that sort of thing, the machine could even be made to subject him to a "review quiz" on this material. . .

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editor's notes

A MESSAGE FROM THE PUBLISHER

With this issue, REASON begins Volume 3. Looking back, it is obvious that REASON has come a long way since it began as an eight-page mimeographed newsletter in September 1968. Volume 2 saw the switch to an expanded size and offset printing, along with a major growth in circulation and the first paid advertising. Nonetheless, it also led to severe cost and scheduling problems, leading at last to the magazine's reorganization under the management of newly-formed Reason Enterprises in the fall of 1970. Start-up capital was obtained and a major promotional campaign is now under way. There are paid subscribers in 45 states and eight foreign countries. A number of university and think-tank libraries subscribe, and REASON articles are being assigned as readings in college classrooms from Cal State-Bakersfield to the University of Hartford.

Where does REASON go from here? First, what is REASON trying to accomplish? Very briefly, REASON is part of a growing current of radical thought that states that the individual is sovereign, that corporate liberalism has had its chance and has been revealed for the neo-feudalism it is, that real social progress consists in maximizing the options available to all (which in our present context primarily implies dismantling the vast state bureaucracy that threatens to stifle us all). REASON is exploring the ramifications of such ideas and values in light of the fact of exploding technological and social change which has become a permanent feature of our age. We are and will be exploring not only what is wrong with existing institutions but also how to get from HERE to THERE (a fully laissez-faire, adaptive, decentralized society).

A second question concerns our marketing approach: who is REASON trying to reach? Clearly, REASON is not for everyone (at this stage in history). But neither is it only for people who consciously consider themselves libertarians. REASON is addressed to all thinking people, particularly those for whom integrity, independence, and liberty are primary values. It is specifically designed as a means for spreading libertarian ideas among such people, not as part of a "movement" but rather as an expanding intellectual community. Young professionals in every field—doctors, lawyers, engineers, innovative businessmen, social scientists—these are people who seek reason, and whom REASON seeks to reach.

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PERSONALS

BRAINS? Neuroscientist, with B.S., M.S., and a professional degree in electrical engineering, plus an M.S. in biology (neurophysiology), currently doing graduate work in experimental psychology, would like to correspond on philosophical issues in the neurosciences. Adam Reed, 509 Willamette St., Eugene, Oregon 97401.

trends

VOUCHER PROGRAM LAUNCHED

Egged on by advocates of competition ranging from Milton Friedman to Christopher Jencks, the Office of Economic Opportunity recently began an experiment that could revolutionize American education. In early February OEO announced the award of preplanning grants to set up educational voucher systems to three cities: Alum Rock, California; Gary, Indiana; and Seattle, Washington. If the plans drawn up by these cities are approved, full-fledged voucher systems will go into operation in September.

Basically, the OEO program follows the guidelines laid down by Jencks, et. al., in their March 1970 *Education Vouchers* study. Racial discrimination will be forbidden, poverty-area vouchers will be worth more, and supplemental tuition may not be charged by participating schools. It is still not clear to what extent the existing school boards will have control of the programs—which could have a sugnificant impact on their success. Still, each of the demonstration cities has *asked* to be in on the experiment, so a basic level of support does exist.

Despite the built-in obstacles, the voucher experiment should go a long way toward demonstrating what competition can do. The long-standing monopolies of the public schools (and the teachers' unions) will be shattered, and *all* the people, not just the wealthy, will at last have a choice of schools.

SOURCE: "A 'Market Economy' for the Schools", BUSINESS WEEK, 6 February 1971, pp. 76-78.

SUBSIDIES FOR THE WELL-TO-DO: THE CASE OF CALIFORNIA

A system of public higher education like the much vaunted one in California is a method of redistributing income. Some Californians pay taxes so that other Californians can go to college free. The interesting question is who pays and who benefits. To find out, W. Lee Hansen and Burton A. Weisbrod of the University of Wisconsin have used a technique born in the auto industry and matured in the Department of Defense: the cost-benefit analysis. Their conclusion is that in California poorer families are disproportionately taxed to send the children of richer families to college (*Journal of Human Resources,* Vol. 4, No. 2, 1969).

The largest subsidy, the $7,140 represented by four years at the University of California, is of course available only to those students whose high school grades were good enough for admission. Those with lower grades may qualify for the $5,800 that pays for a state college degree or for the $1,440 that two years at a junior college costs the state.

The question is: Who gets the subsidies the State makes available? Of all the students graduating from high school in California in any one year, 41 percent do not attend any state institution of higher learning and so get no subsidy at all. (Of this 41 percent, most—80 percent— don't go to college at all, and the rest go to private colleges and universities.) Of the 59 percent who do go to state schools, only some complete the program. For that reason the authors calculate that 14 percent of the students will receive something between $1 and $749 (up to one year of junior college); 30 percent will get between $750 and $1,999 (they will go into the second year of junior college); 3 percent will receive between $2,000 and $3,499; another 3 percent will stay on in college longer and use up between $3,500 and $4,999; 6 percent will use between $5,000 and $6,499; and only 3 percent will actually receive $6,500 or more. Clearly, the distribution of subsidies is markedly unequal. Adult Californians pay taxes to support a school system that educates only a small proportion of their children.

When the distribution of those receiving the subsidies (and 41 percent don't receive any) is examined in the light of the family income of recipients, its inequality stands out more sharply. The average family income in California is $8,000. Those families who have no children in the state higher education system are slightly poorer than that; their average yearly income is $7,900. All the families with children in the higher educational system have a higher than average family income, and that average rises with the level of the institution their children attend. Thus, the average family with children in a junior college (the cheapest kind) has an income of $8,800 —slightly higher than the overall California average. The average family with children in a state college—the next step up the ladder—is more comfortable; its income is around $10,000. The richest families, on the average, are those with children attending the most heavily subsidized University of California; their average income is $12,000. Families with children in junior colleges are receiving a state subsidy of approximately $720 a year, or 8 precent of their average income. Families with children in the state college system are receiving subsidies averaging $1,400 a year, or 14 percent of their family income. Families with children in the University of California receive the highest subsidy per year, $1,700 which is approximately 13 percent of their yearly income.

The final question here is to see which families pay the taxes that send some of their children to college. The authors of this study have no way of separating out those state and local taxes which directly support the higher educational system, so that their analysis is based on overall state and local tax figures. Their figures show that the poorest California families pay the largest share of their income in state and local taxes: families with an income of under $4,000 pay approximately $774 in state and local taxes, which amounts to a tax rate of 23.7 percent of their yearly income. Families with an income between $4,000 and $6,000 pay at a rate of about 10.5 percent of income. For families with an income between $6,000 and $8,000, the state and local tax rate levels out at about 8 percent, and there it remains as income increases. This means that a family with an income between $6,000 and $8,000, for example, pays approximately $576 in state and local taxes, while a family with an income of over $24,000 pays about $4,093—in both cases this is an effective tax rate of 8.2 percent of income.

When the taxation and subsidy figures are examined together, it is possible to see who pays and who benefits in the California system. A good part of the paying is done by California families who have no children in the system; their average income is $7,900, they pay about $650 in state and local taxes, and they get no subsidies for higher education. Families with children in the junior college system are somewhat richer to begin with ($8,800); they pay $680 in taxes and receive about $720 worth of education subsidies, for a net gain of $40 a year. Families who send their children to the state college system start off with an average income of $10,000; they pay about $770 in taxes and get subsidies worth $1,400 for a net gain of $630. Finally, the richest families (average income of $12,000) with children in the University of California pay about $910 a year in state and local taxes, receive subsidies worth $1,700 a year and wind up with a net gain of $790.

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letters

BIG BUSINESS: CHALLENGE

Someday, somebody should tell R.A. Childs that words have meanings. In "Big Business and the Rise of American Statism" (February 1971, Vol. 2, No. 11), Childs talks about organized crime but insists on calling it "Big Business" throughout the article. Socialist slogans to the contrary, business and crime are not synonymous. A businessman is a man who earns wealth by organizing the production, distribution, and voluntary exchange of values. A man who obtains things by initiating force, either directly or through hired thugs, is properly called a criminal. A criminal is no less a criminal when he lets the taxpayers hire his thugs for him.

The laws under which American businessmen were subjected to prior restraint and to the presumption of guilt were not made solely by disinterested "progressives" or "liberals." In Ayn Rand's novel *Atlas Shrugged* most oppressive legislation is passed at the behest of men like James Taggart and Orren Boyle. James Taggart is the president of a major railroad, and Boyle owns a steel company, but no one who has read the book would call either of them a businessman. The laws which make businessmen a persecuted minority in America were pushed through, in part, by criminals who were afraid of competition from (real) businessmen. Some of these criminals were railroad presidents and steel tycoons. Did we really need Childs to point that out?

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"HIGH-JACKING THE TAXPAYER" RESPONSE

In his article (January 1971, Vol. 2 No. 10), Robert Poole was clearly arguing against public subsidies for the airline industry, particulraly with regard to aircraft insurance costs. These costs have spiralled upward with the introduction of the 747 jumbo jets, together with costs to provide armed guards in aircraft to prevent high-jacking. The government in so doing has responded to cries for help from the major affected airlines to put an end to aircraft high-jacking. Rather than having the costs for these guards borne by the general public, as they are now, Robert Poole seems implicitly in favor of such costs being borne by the airlines. Unfortunately, he did not go into the reasons for this view in the short space he devoted to this topic in his article. This omission is a pity, as a very important issue is raised: "What are these armed guards supposed to do—prevent high-jacking or apprehend high-jackers?" In the broader sense, "What should the proper role of law enforcement be—prevention or apprehension (enforcement of the law)?" I submit that settling who should rightly pay for armed guards on aircraft depends on the answer to this question.

According to the mandate given law enforcement agencies, their overriding mission is to enforce the law. The fact that they also have other obligations implicit in their charters or imposed upon them by society in general complicates the issue, giving rise to the principal dilemna faced by police agencies today. James Q. Wilson summarizes this point well when he analyzes the contradiction between *enforcing the law* and *maintaining order.* In many instances (breaking up a barroom brawl, for example), maintaining order is required even though the law is technically broken and an arrest may be made. The dilemma is faced by the officer on the beat who is forced to make an on-the-spot decision, often with weighty consequences. The same dilemma follows the fact that the police are technically obliged and empowered to enforce laws which may be unpopular to the populace, despite the fact that the police have no hand in formulating laws. Selective enforcement of the law that inevitably results only serves to deepen the impasse in the relations existing between the police and the community.

But what would happen if the community could take on the role of order maintenance for itself? What if a mechanism could be developed for self-protection? How would this affect the role of the police in the community? Mounting evidence supports the fact that this impromptu order-maintenance role is being handled by private security forces all over the country. A recent article in FORBES (included in REASON, Trends, Vol. 2, No. 10), reports a security industry estimate that two-thirds of all patron forces in the U.S. are employed by private organizations for security and protective purposes. Further evidence, cited in the *Wall Street Journal,* says tht the electronic burglar alarm industry is mush-rooming—the demand from corporate and individual clients seems to grow along with the increased sophistication of these devices.

Again, much of police public relations deals with the problem of imploring the public to cooperate with them by making it more difficult for someone to commit a crime. Help us to help you, they say. Lock your car, lock your house, cancel the milk and newspaper deliveries when on vacation, leave your home lights burning at night when away, telephone the police when you see something suspicious, and so on. Thus, the public is being urged to assume more of the responsibility for self-protection. Several small groups have even taken it upon themselves to provide such protection formally, as witness the Bel Air Patrol in West Los Angeles. The underlying principle here is that the benefits are worth the costs.

Judging from available crime statistics for robberies, for example, there is little the police can do to prevent such crimes—the damage has already been done by the time the crime is discovered. Given this rather sad circumstance, what does one do? Two courses are possible: either pay more taxes for more police service (which may or may not reduce the frequency of robberies) or pay for specific localized protection

independently of other police services. The answer very much depends on an individual or group decision based on what risk is involved or, more simply, how much one stands to lose.

Let's extend this line of thought to an airline company that desires protection for both itself and its passengers. Not only does the airline stand to lose a great deal were an aircraft to be diverted or damaged, but a parallel risk is incurred by the passengers who fly with the airline (not to mention risk of loss or delay of freight). This risk is implicit in the price for a trip charged by the airline or would be in a truly competitive market. As things stand now, where interstate and international fares are regulated, it is impossible to determine what proportion of the ticket price is used to assure the passenger that his trip will be completed on time and in safety. Whatever the airline has to spend *in excess* of normal operating costs to make the passengers' trip risk-free is a measure of the responsibility of the airline toward its passengers. Thus, this cost is actually or implicitly a part of the price for the flight. Examples of these kinds of costs include such items as the following: advanced training programs for the airline pilots; improved programs for engine failure detection, preventive maintenance, and overhaul; engine emission control to reduce air pollution; and development of improved navigational aids which, at present, is subsidized by the FAA. It seems to me that the provision of armed guards to prevent high-jacking of the aircraft logically falls into this category.

All this is well and good, but the present system does not always follow logical thinking toward rational solutions. Taxpayers' costs are out of proportion to the benefits they receive. Costs to the airlines may rise, yet they are not allowed by law to raise their fare schedules. A Federal law outlaws high-jacking, punishable in certain instances by death, and the FBI, in their role as enforcers of the Federal law, see that their (publicly financed) duty to enforce this law by their presence on aircraft. The system is self-sustaining. Bureaucracies out of touch with economic reality behave predictably. Is there no way out? Consider the situation which might exist were regulation of the airlines to cease and competitive conditions restored. Economic theory, in terms of behavior and individual preference, says that the price for a service offered will settle at a value which people are willing to pay and which also enables that service to continue. As the costs of doing business increase, if a company is to stay in business, so must its prices increase. I assume here, of course, that some margin is maintained, however small, as an incentive for a firm to stay in business. If prices increase beyond those charged by its competitors in a free market, the company will lose business. If a particular airline, therefore, continually experiences high-jacking, or even a high frequency of mechanical problems that increases the passengers' risk, business will also be lost. Free competition, as Robert Poole stresses in most of his articles in REASON, is designed to get rid of the inefficient, the ineffective, and more recently, the irresponsible firms in the marketplace, unless they shape up.

In conclusion, armed guards perform a preventive function. Such guards are a legitimate cost of doing business which should be borne by the airline. Only flights that produce arrests can be considered to entail apprehension. Because there is no way, by definition, of knowing how to identify a potential high-jacker prior to a flight—else he would be barred from entering the plane—the police, or FBI, in their role of enforcers of the law have no business to be *on* the planes. While there is little doubt that the presence of security officers on these planes has been responsible for the dramatic reduction of aircraft high-jacking incidences, the *airlines* have been spared this expense. Airlines have been receiving a free guard service, because the costs for such service never show up in their financial statements. The implications for law enforcement in general, which I have here alluded to only briefly, are profound, and deserve careful consideration.

Stanley C. Abraham
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LEADING AUTHORITIES AGREE UNANIMOUSLY . . .

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BIG BUSINESS: RESPONSE

The February issue of *Reason* contains a number of points which call for comment.

Roy Childs' article, "Big Business and the Rise of American Statism," is, despite certain statements about which I have reservations, a fine one, and I eagerly anticipate its conclusion. However Mr. Childs says, in rejecting both Marx's slogan that "capitalism needs war" and Miss Rand's assertion that the reverse is true, while socialism (read 'statism') needs war, "An economic system is not an entity, holds no ideas, takes no actions, in short, is not the metaphysical kind of entity which can have needs." I cannot agree with his conclusion. The Random House Dictionary of the American Language lists as one of the definitions of the word 'need': "A requirement, a lack of something. . . deemed necessary." Now, if entities (not abstractions) are the only things which can have needs, or requirements, then it follows that there are no prerequisites for the existence of any abstraction. Examples would be 'life,' 'profit,' 'freedom,' 'happiness.' etc. By Mr. Childs' exclusion of any of these concepts from having requirements or necessary pre-conditions, the absurdity of his position can be seen, for this is no less than the denial of the law of cause and effect. Can he maintain that life does not require an input of energy? that profit has no need of (at the very least) some method of accounting? that freedom requires no absence of compulsion? that happiness needs no goals, no achievement? Surely no one can point his finger at and thereby give an ostensive definition of any of these abstractions, just as one cannot point to 'capitalism,' as such; yet they have *sine qua non* requirements, or needs. Miss Rand's point is that the existence of laissez-faire capitalism (or even a mixed economy, so long as the mixture is strongly weighted on the side of freedom) does not depend on war, since wars are always counter-productive. A capitalistic economy is productive, and depends on free trade, not on looting. On the other hand, socialism is by its very nature dependent on coercion, either against its own citizens or against its neighbor states, or both, since human life requires the production of the things needed for its sustenance, and somebody must produce them, or the society will collapse, from malnutrition of its members if nothing else. To hold, therefore, that statism needs war and capitalism does not is to hold that parasitism requires a host organism, whereas a productive, self-sustaining system requires only the achievement of its members and the freedom to trade. The fact that some men may think capitalism needs war does not make it so.

Further, I think that Mr. Childs' attribution of a blanket moral endorsement of all businessmen and industrialists to Miss Rand is improper. Although the statements in the literature have perhaps been understressed (for Mr. Childs at least), Miss Rand has consistently condemned the 'businessmen' who advocate and seek to implement governmental controls. In "Notes on the History of American Free Enterprise" (in *Capitalism, the Unknown Ideal,* the same book which Mr. Childs quotes in support of his contention of her unqualified endorsement of businessmen), Miss Rand states, in relation to the monopoly practices engaged in by California's Big Four, with the help of the legislature (another point, Mr. Childs: Coercive monopoly—yet another abstraction—requires legislative action of some sort), "Yet the Big Four were not free enterprisers; they were not businessmen who had achieved power by means of unregulated trade. They were typical representatives of what is now called a mixed economy. They achieved power by legislative intervention in business; none of their abuses would have been possible in a free, unregualted economy."

One further inaccuracy in your latest issue (a minor one) that I should like to call attention to occurs in Robert Poole's excellent "The Power Crisis." The charge assessed (at government-controlled rates) by one railroad against another for the use of its equipment is known as a 'per diem' charge, not a demurrage charge. Demurrage is what is assessed (also at government-fixed rates) against shippers and receivers of cars for detention while loading or unloading, or awaiting loading or unloading, or while being held enroute at the request of the shipper or receiver, beyond tariff-defined free time. For instance, on lumber, a charge of $5.00 is made for each of the first four days after the expiration of free time, once a car has arrived at its destination and the consignee has been notified and a specified free period of time has elapsed, usually 24 hours, without instructions having been received to place the car for unloading. The per diem charge, on the other hand, varies with the value of the car (although it is still unrealistically low) and is assessed for every day the car is on the tracks of a non-owner railroad (with certain specific exemptions), whether it is moving or not. The arbitrary holding of this charge to below-market rates by the ICC is the cause, not only of temporary shortages of certain types of equipment (as in Mr. Poole's example) but of practically all types of equipment, and is responsible for the decades-long decline in boxcar ownership of nearly all the eastern railroads—it is much cheaper to rent boxcars at a nominal charge per diem than it is to invest the money in the acquisition of new cars (which most of the eastern lines are in no financial position to do anyway, since the ICC imposes the rates all railroads must charge for the transportation of goods themselves in all cases, thereby limiting the amount of profit that can be made, or as it works out in the case of some railroads, e.g., the Penn Central, specifying the loss that must by borne by the stockholders).

If there ever was a case for the complete abolition of governmental regulation, the railroad industry certainly provides one.

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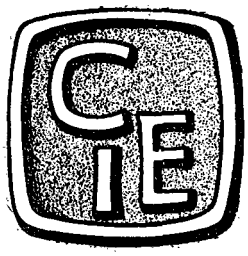

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